



Bharat Heavy Electricals Limited

(A Govt. Of India Undertaking)

Power Sector, Eastern Region

BHEL BHAWAN, PLOT NO. DJ-9/1 , SECOTR II ,

SALT LAKE CITY , KOLKATA ,WEST BENGAL, INDIA

Phone : 033-23398220,033-23211690 FAX : 033-23211960

Sub	TENDER CHANGE NOTICE (TCN-01 DTD. 01/12/2021)
Job	SUPPLY OF PERMANENT COLOUR COATED METAL CLADDING FOR WALL/ ROOF TO 2X660 MW MAITREE STPP, RAMPAL, BAGERHAT, BANGLADESH
Ref	TENDER NO.: PSER:PUR:PMX:374(VIII):053(ENQ:21:PP:0015:PUR:66) Date 30/11/2021.

With reference to above, following clarifications, relevant to tender, may please be noted and complied with while submitting the offer.

1) RELEVANT DRAWINGS OF FOLLOWING AREAS ARE ATTACHED.

- 1) Gypsum Dewatering Building
- 2) RC Pump House (Unit-2)
- 3) Permanent Store Building
- 4) Wet Ball Building
- 5) Construction Shed (Total 14 Nos)
- 6) Work Shop Buildings
- 7) Switch Yard Control Building & Ventilation Room
- 8) Misc. Structures (FO Parking Shed, Water tanks, etc)

2) BIDDERS TO QUOTE THEIR OFFER CONSIDERING THE LATEST SCOPE & PROVISIONS/TERMS AND CONDITIONS OF THE TENDER.

3) Revised 'No deviation certificate' is attached. Bidder to submit their offer along with stamped & signed copy of this TCN & 'No deviation certificate' as per attached format only.

4) All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

ENGINEER (PURCHASE)

Encl: As above.

(Signature, date & seal of authorized representative of the bidder)

ANNEXURE - 2

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

To,
Bharat Heavy Electricals Limited,
POWER SECTOR – EASTERN REGION
2nd FLOOR, Block-DJ, Plot- 9/1, SECTOR
SALT LAKE CITY, KOLKATA – 700 091
FAX – 033-2321-1960

Job: “SUPPLY OF PERMANENT COLOUR COATED METAL CLADDING FOR WALL/ ROOF TO 2X660 MW MAITREE STPP, RAMPAL, BAGERHAT, BANGLADESH”.

E-Tender No.: PSER:PUR:PMX:374(VIII):053(ENQ:21:PP:0015:PUR:66) Date30/11/2021, TCN-01 Date 01/12/2021.

Dear Sir/Madam,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

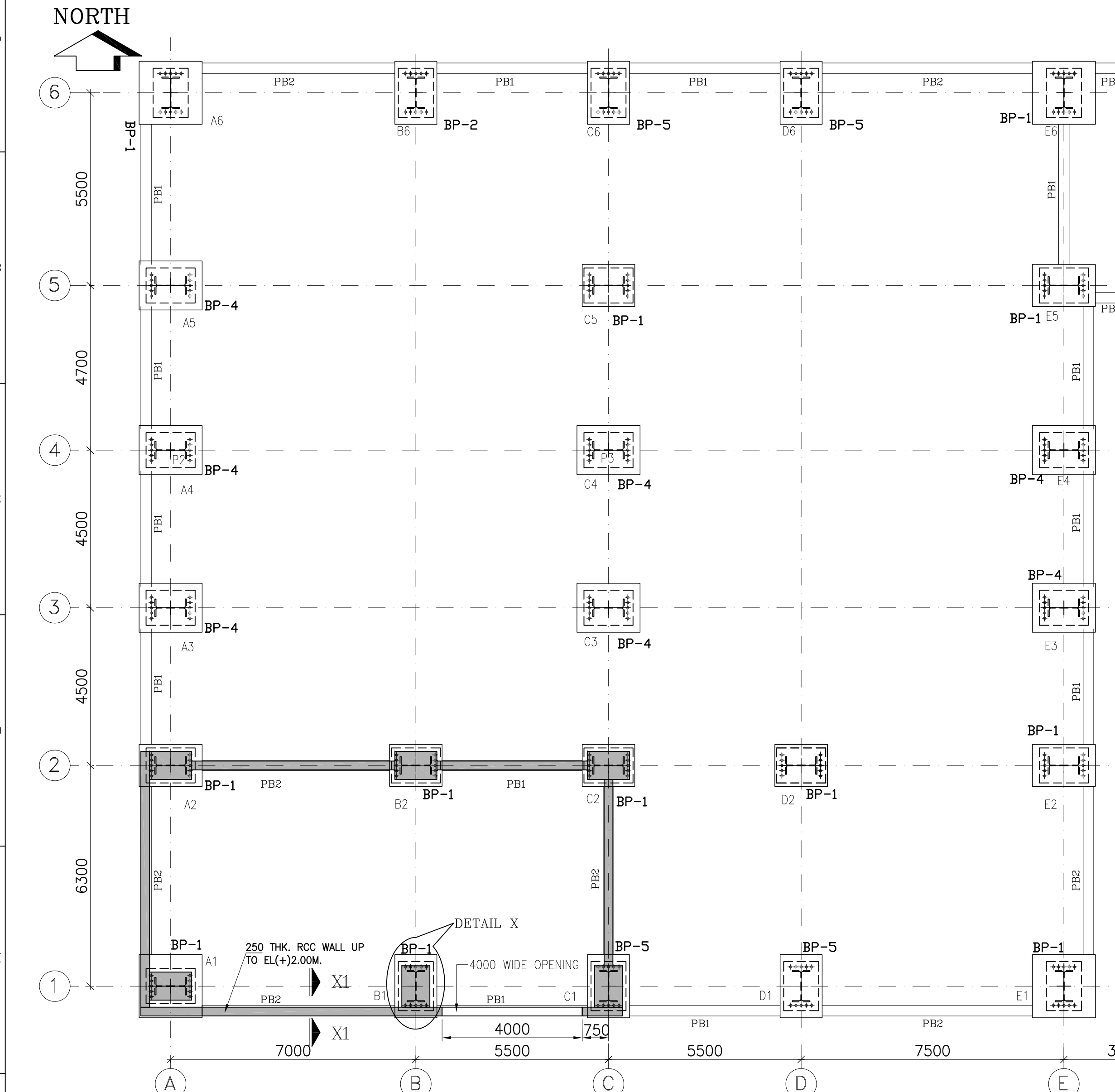
We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void. We confirm to have submitted/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us and as per aforesaid references.

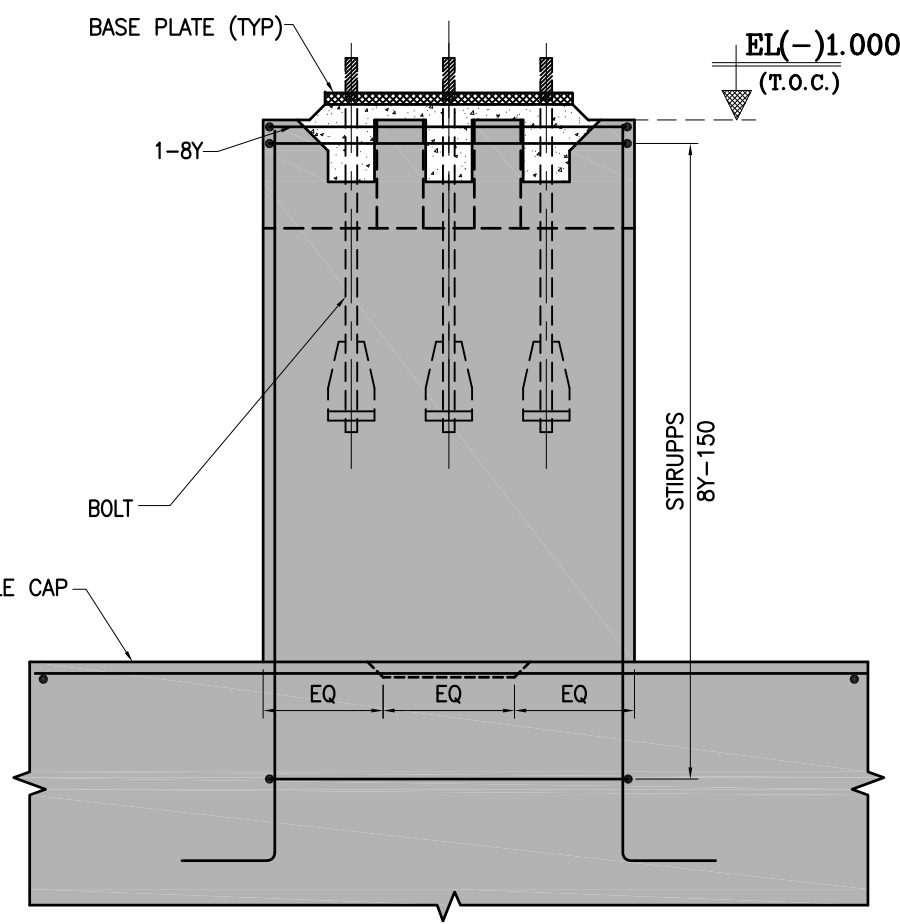
Thanking you,

Yours faithfully,

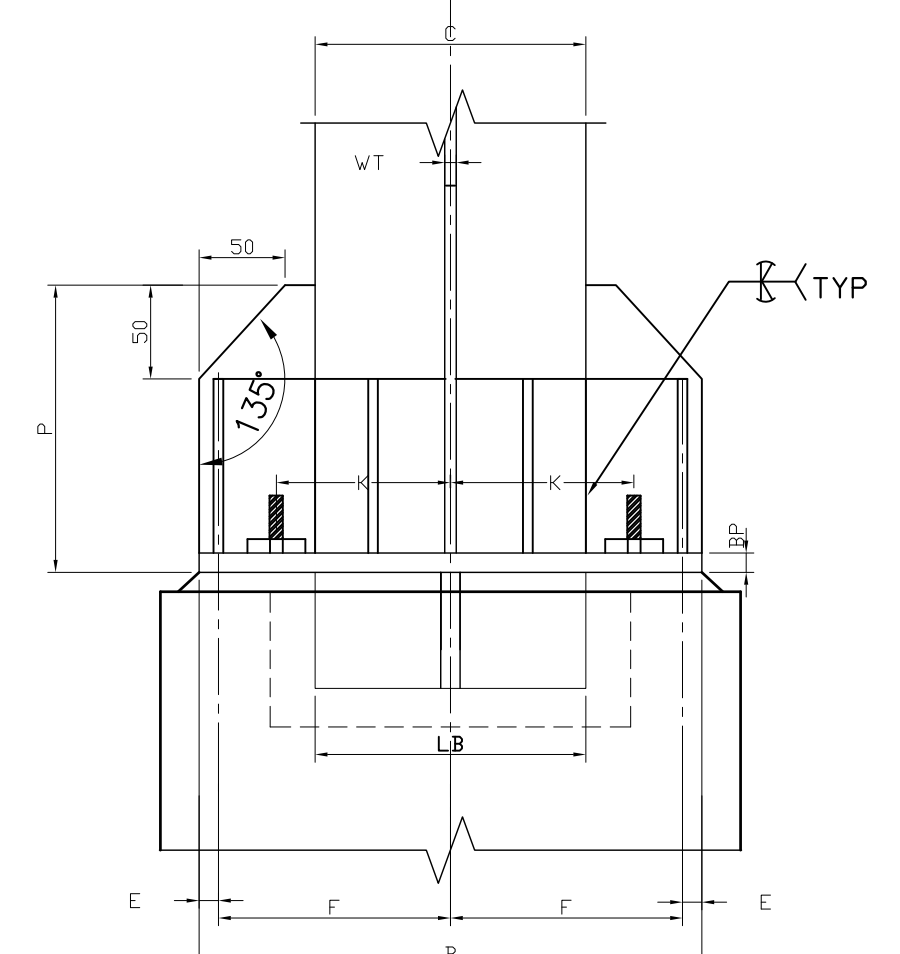
(Signature, date & seal of authorized representative of the bidder)



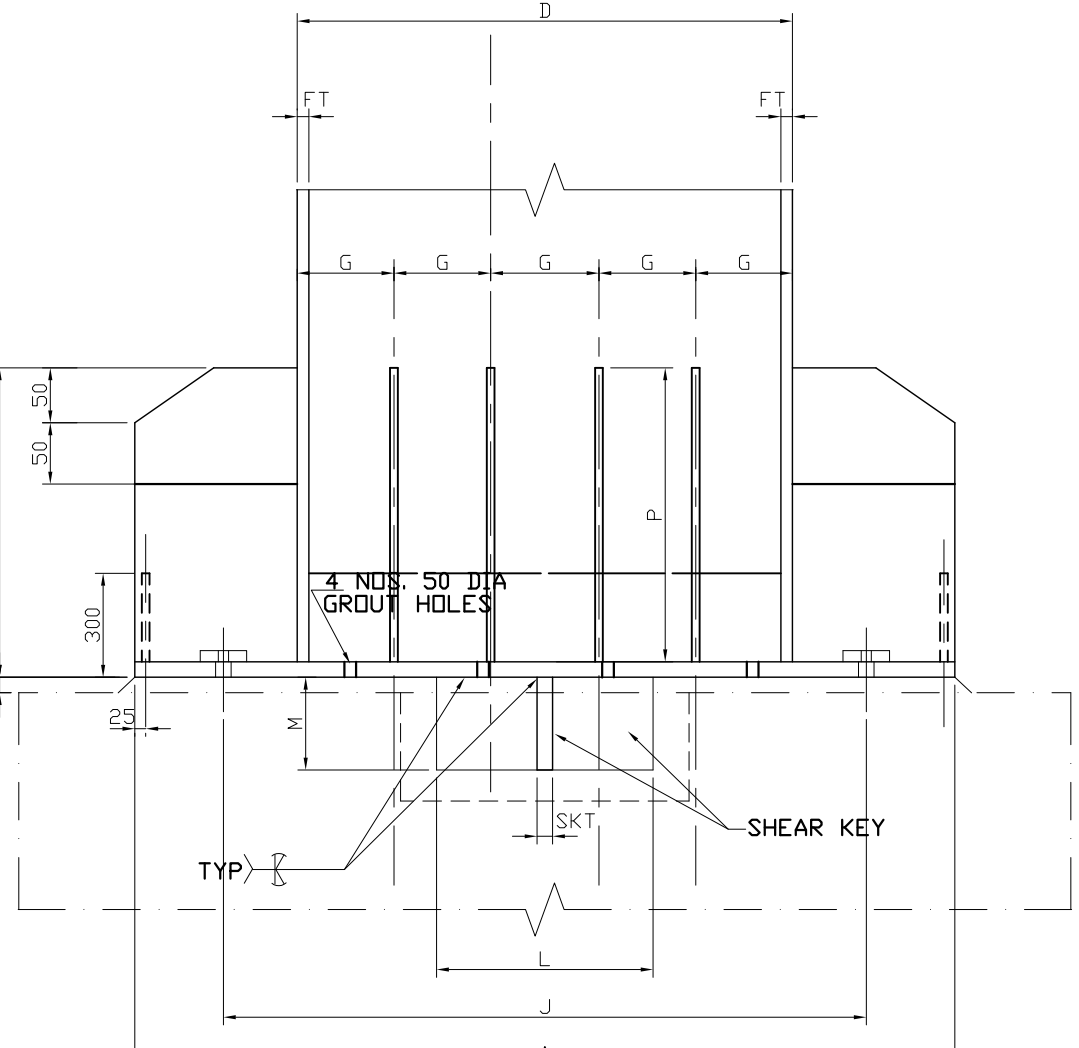
BASE PLATE PLAN AT EL (-)0.950M



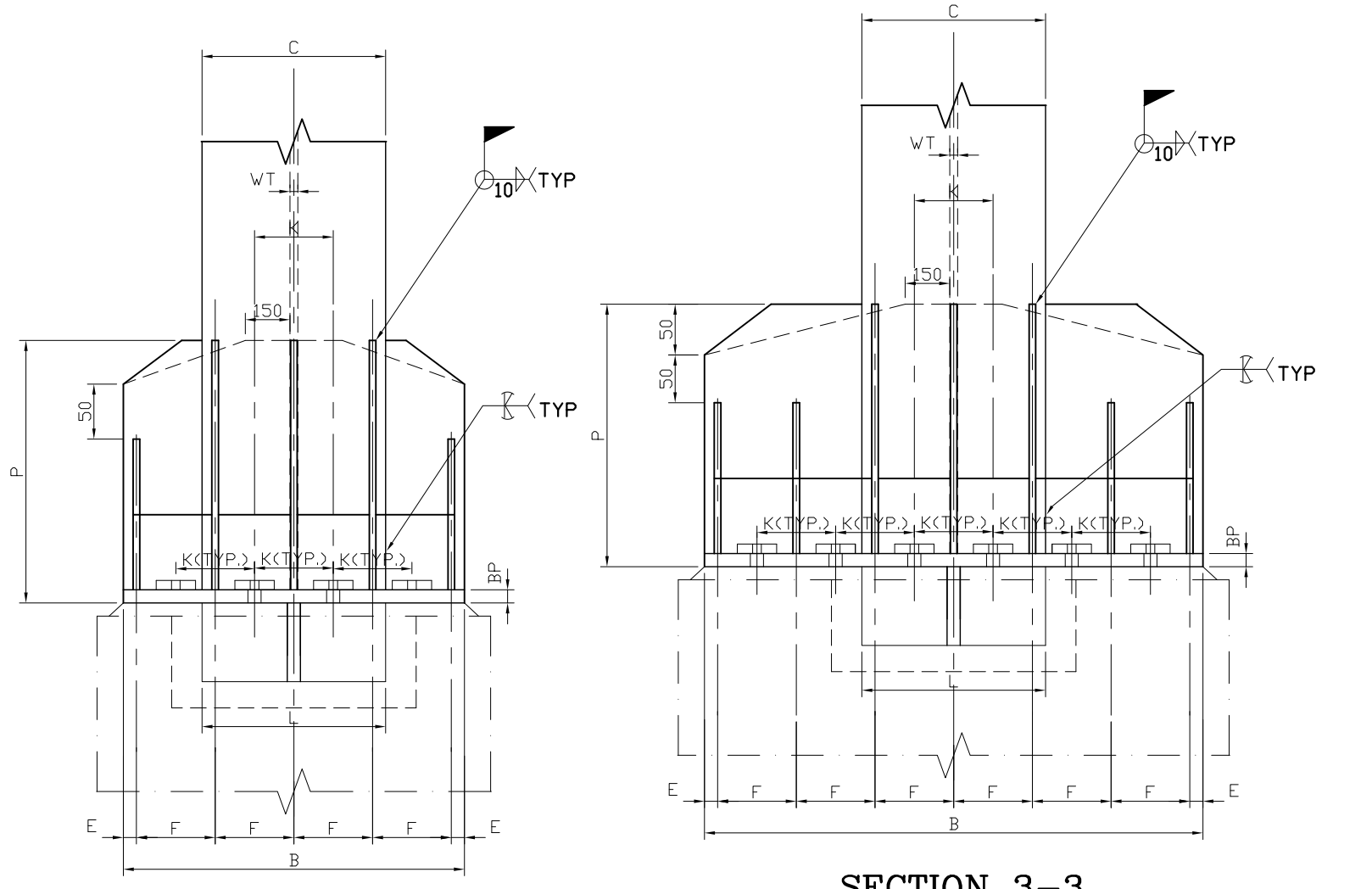
TYPICAL PEDESTAL DETAILS



SECTION 6-6

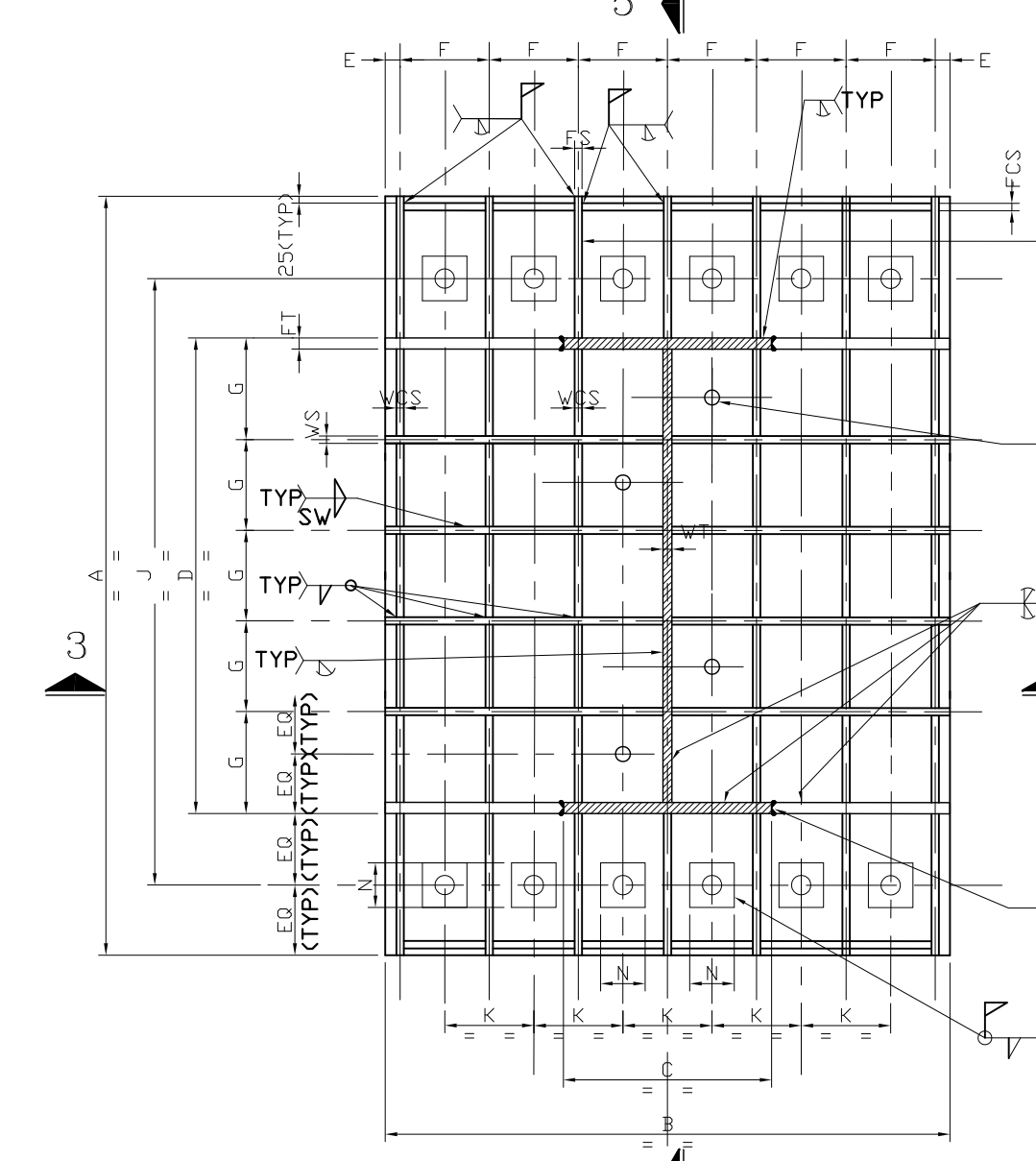


SECTION 5-5

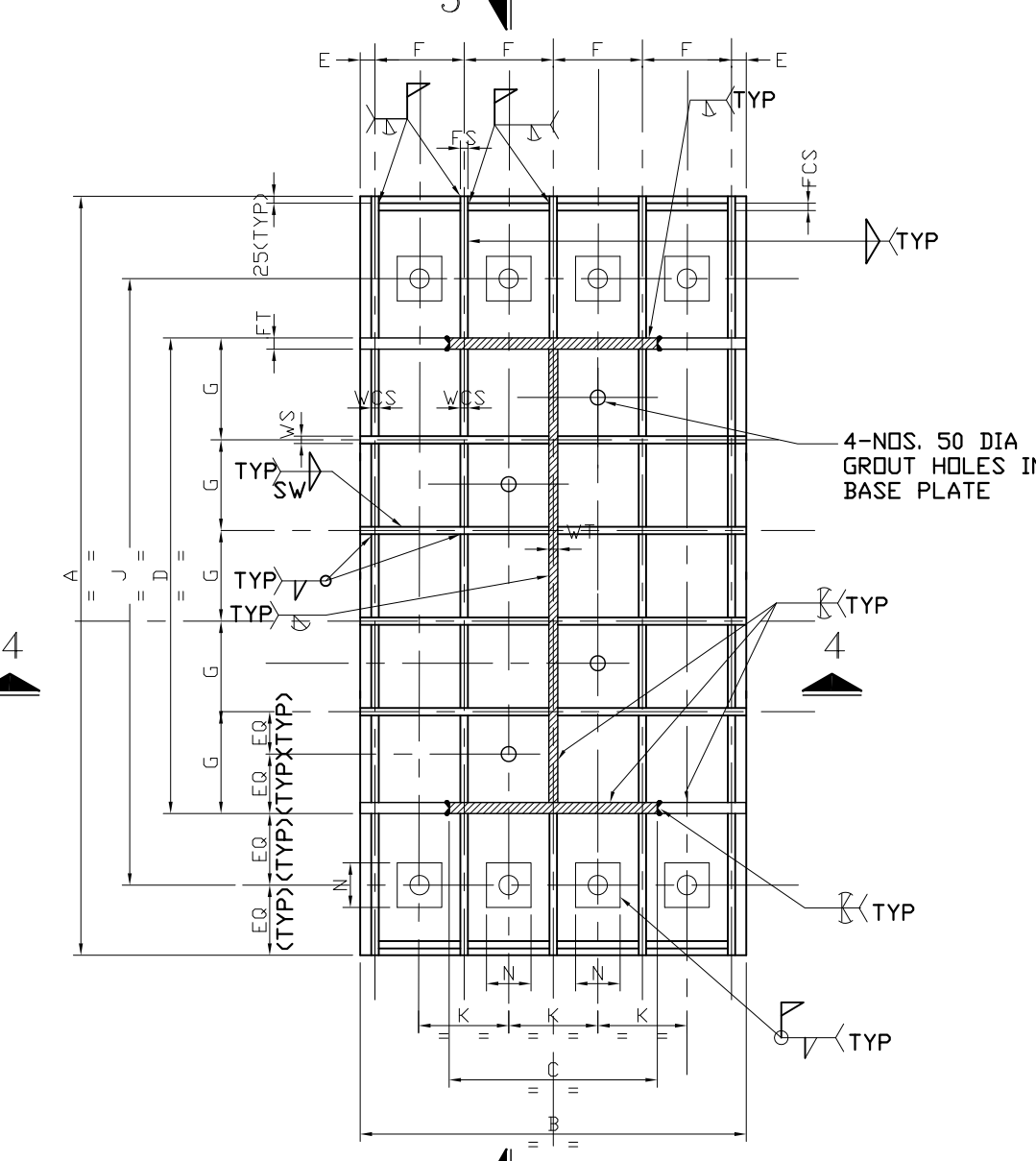


SECTION 4-4

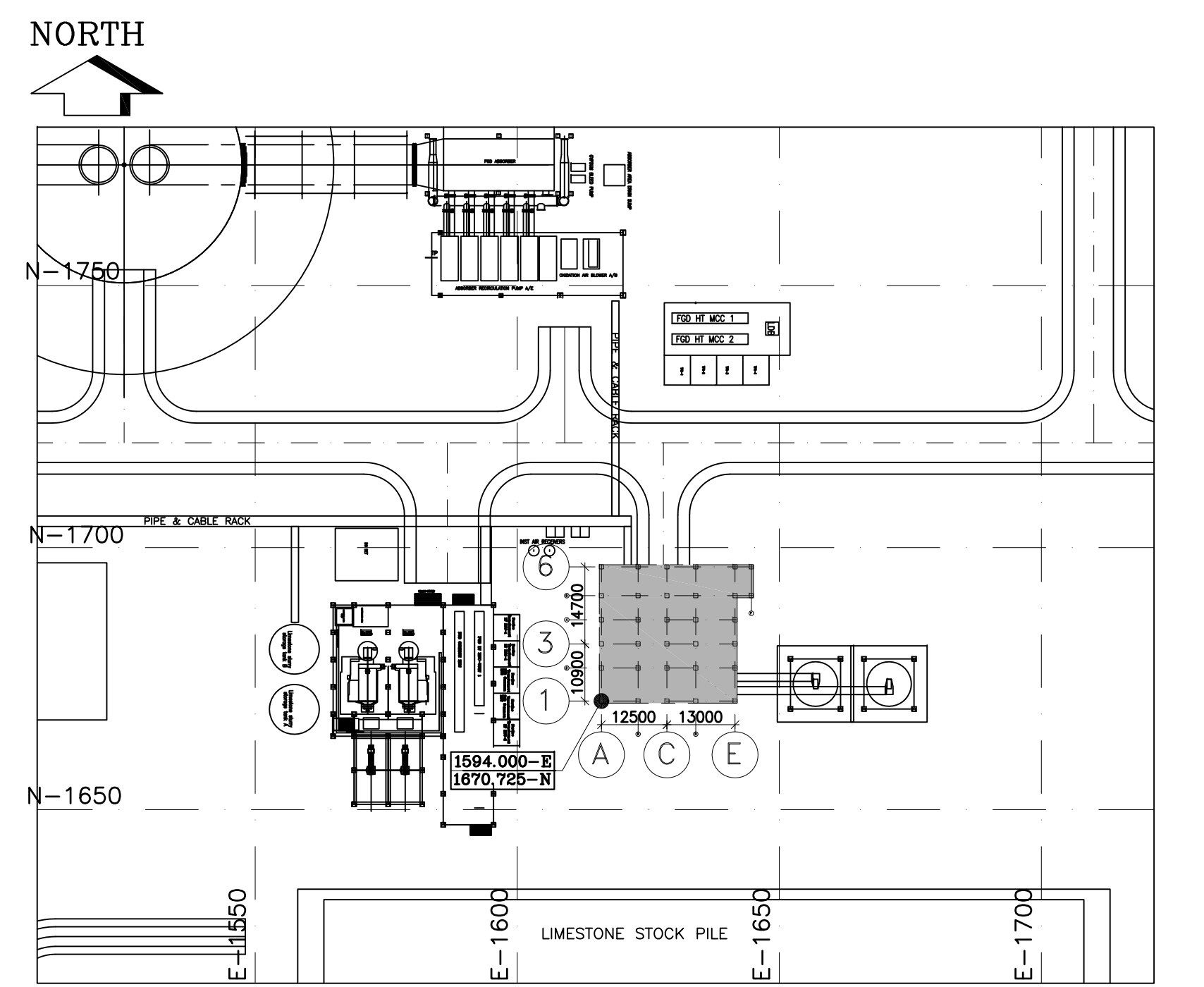
SECTION 3-3



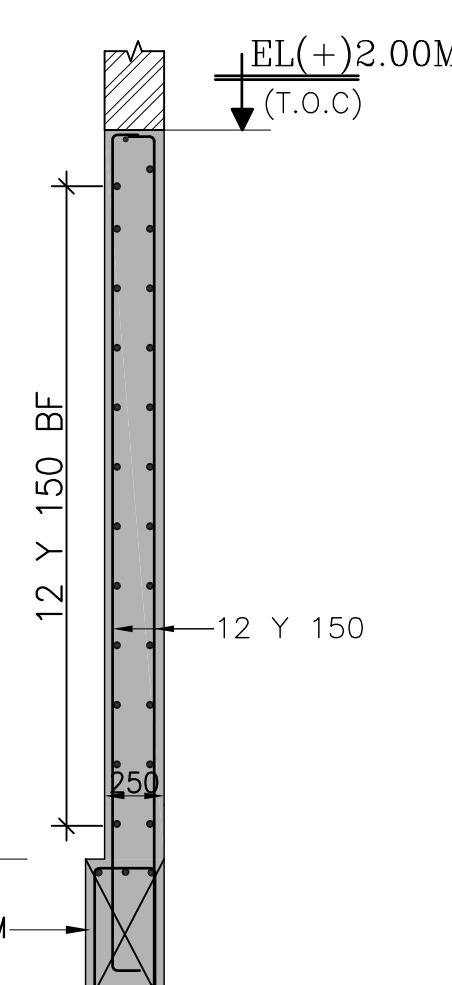
TYP. DET. OF BASE PLATE MKD. BP-4



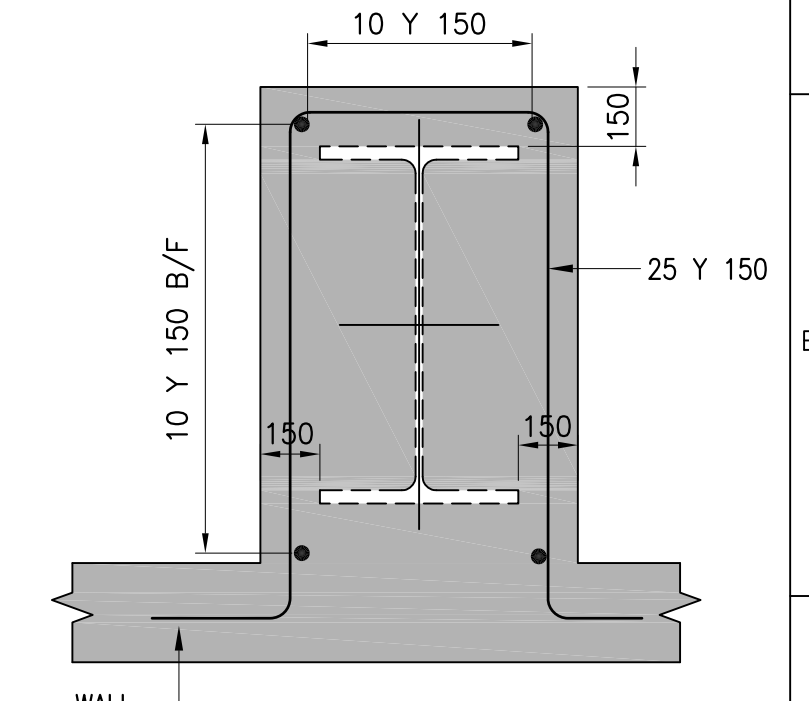
TYP. DET. OF BASE PLATE MKD. BP-2&BP-5



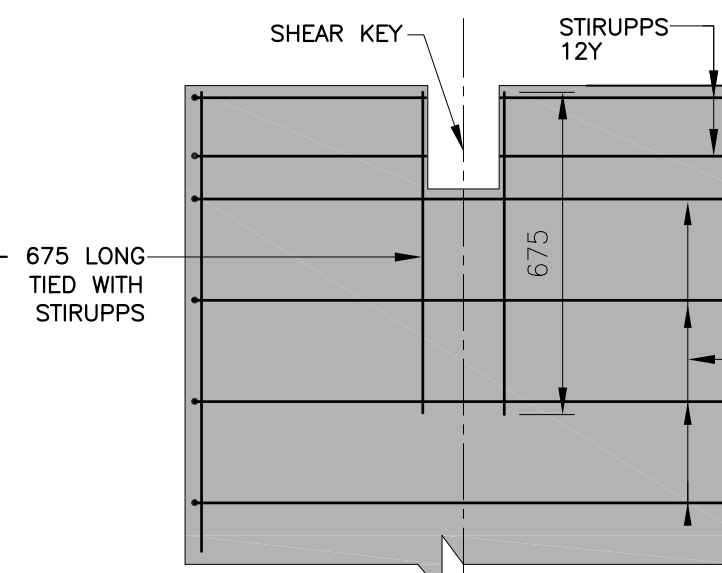
KEY PLAN



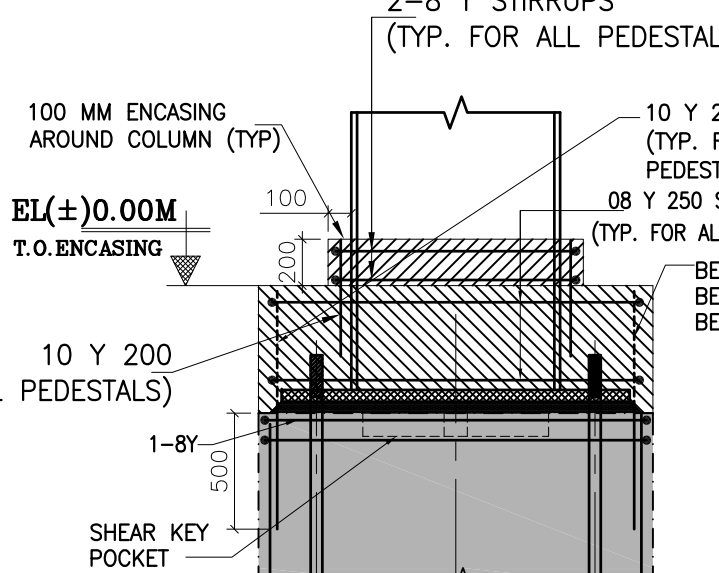
SECTION X1-X1



DETAIL-X



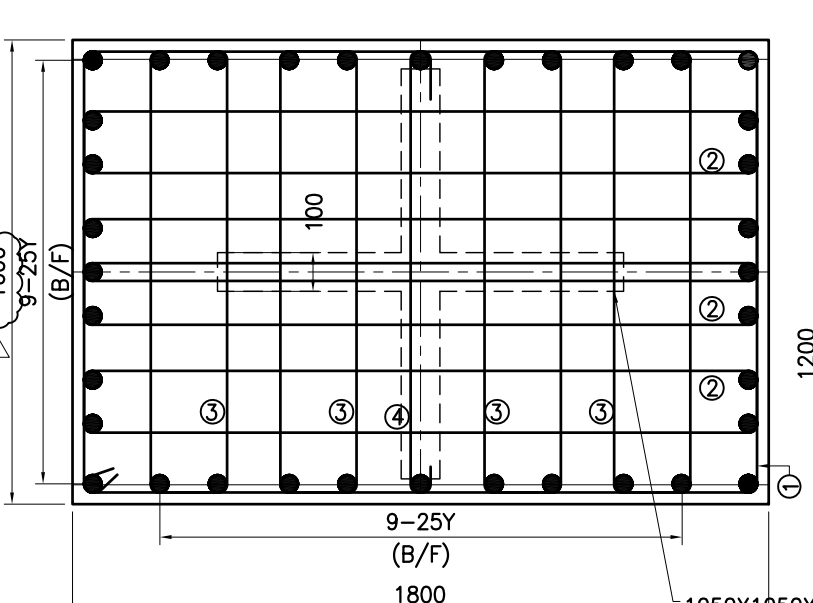
TYP. DETAIL SHOWING REINFT. DET. AROUND SHEAR KEY



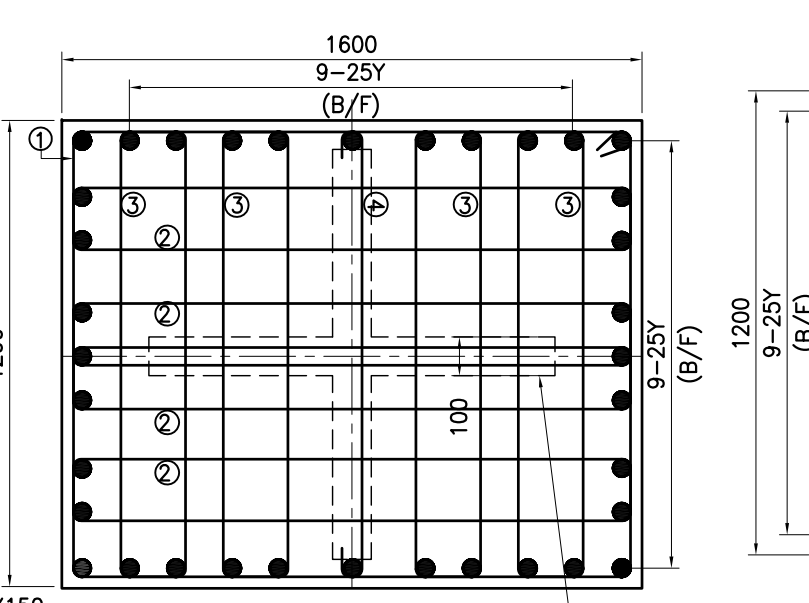
TYP. PED. ENCASING DETAILS

TYP. DETAIL OF SHEAR KEY FOR BP4 & BP5

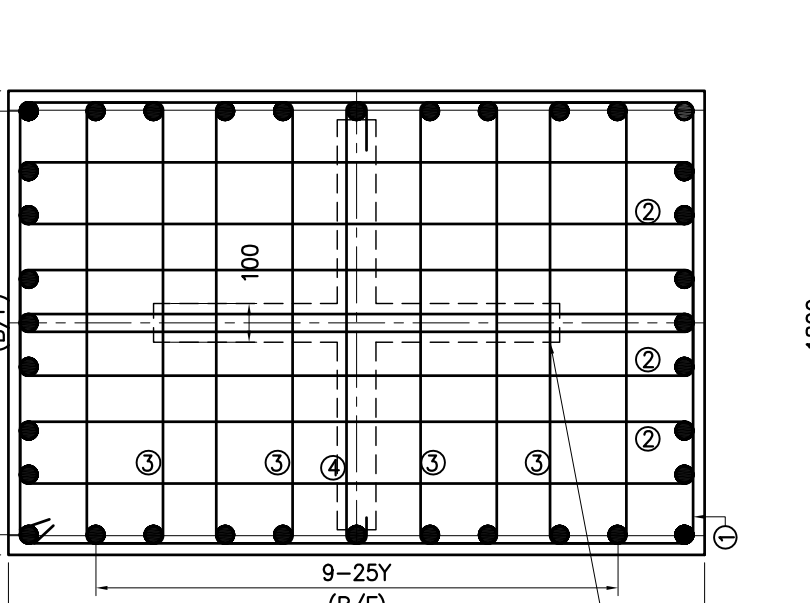
TYP. DETAIL OF SHEAR KEY FOR BP1 & BP2



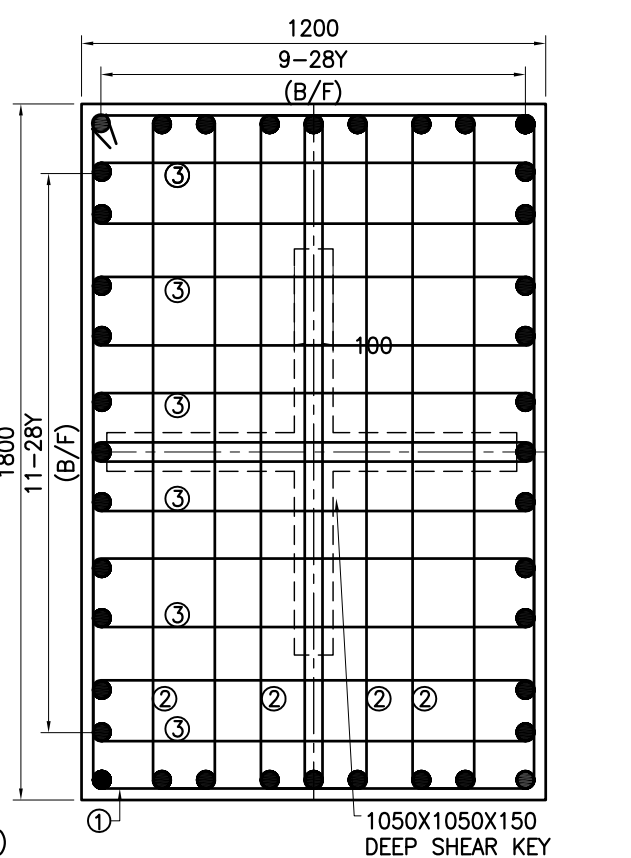
RC DET. OF PED. MKD. A3,A4,A5,C3,C4,E3,E4



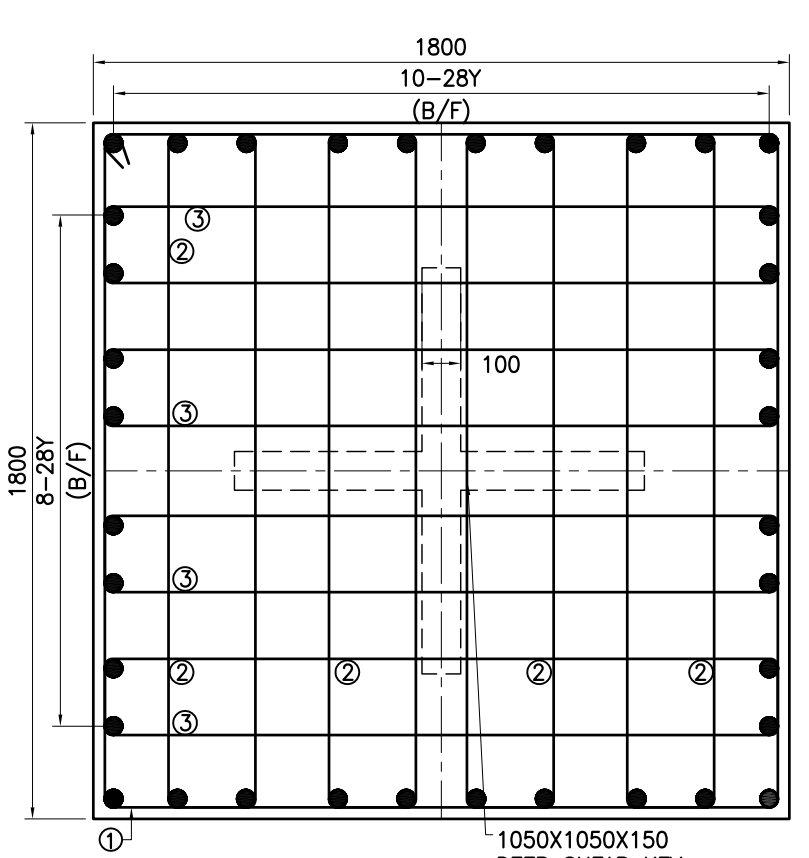
RC DET. OF PED. MKD. B2,C2,D2,C5



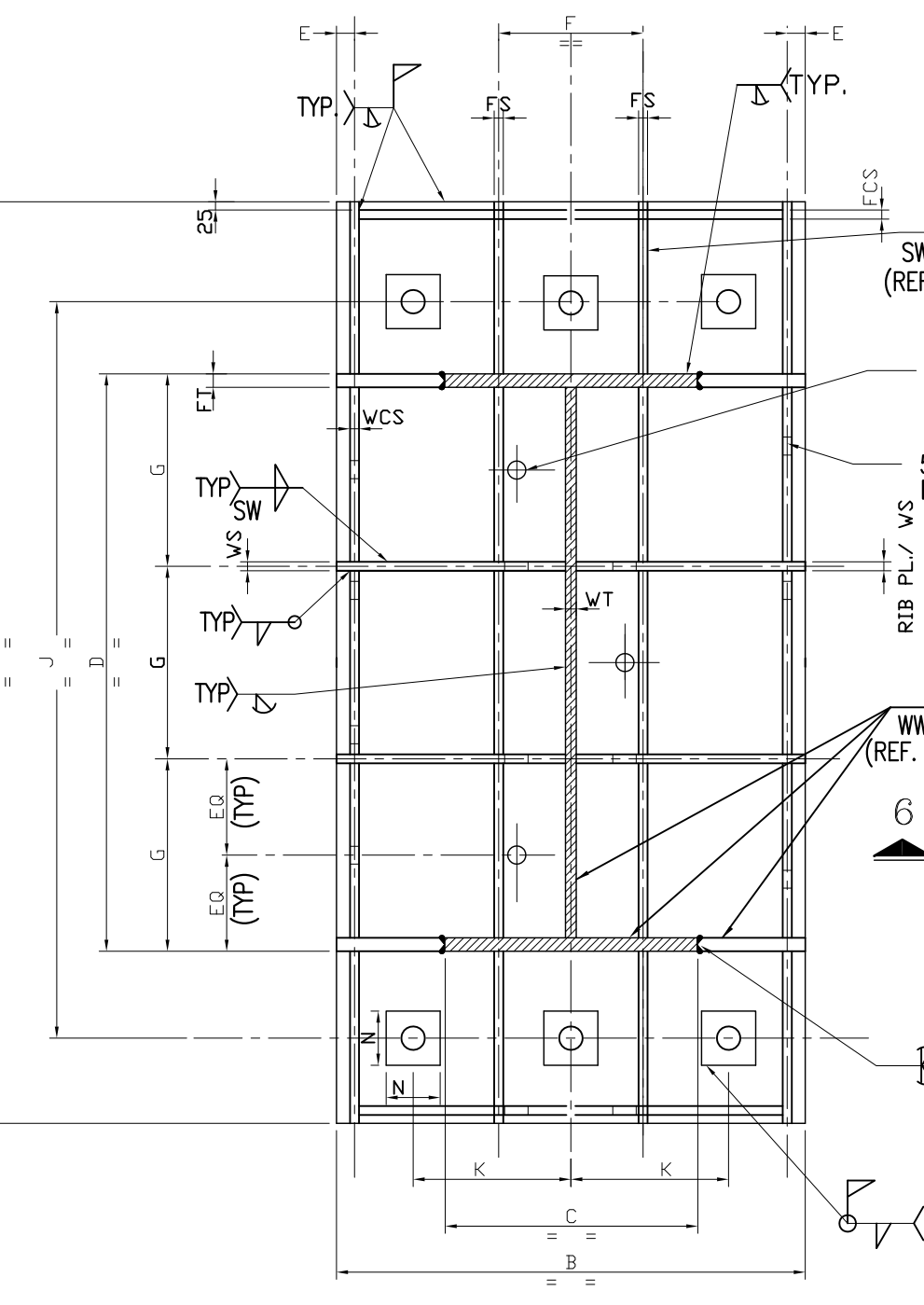
RC DET. OF PED. MKD. A2,E2,E5,F5



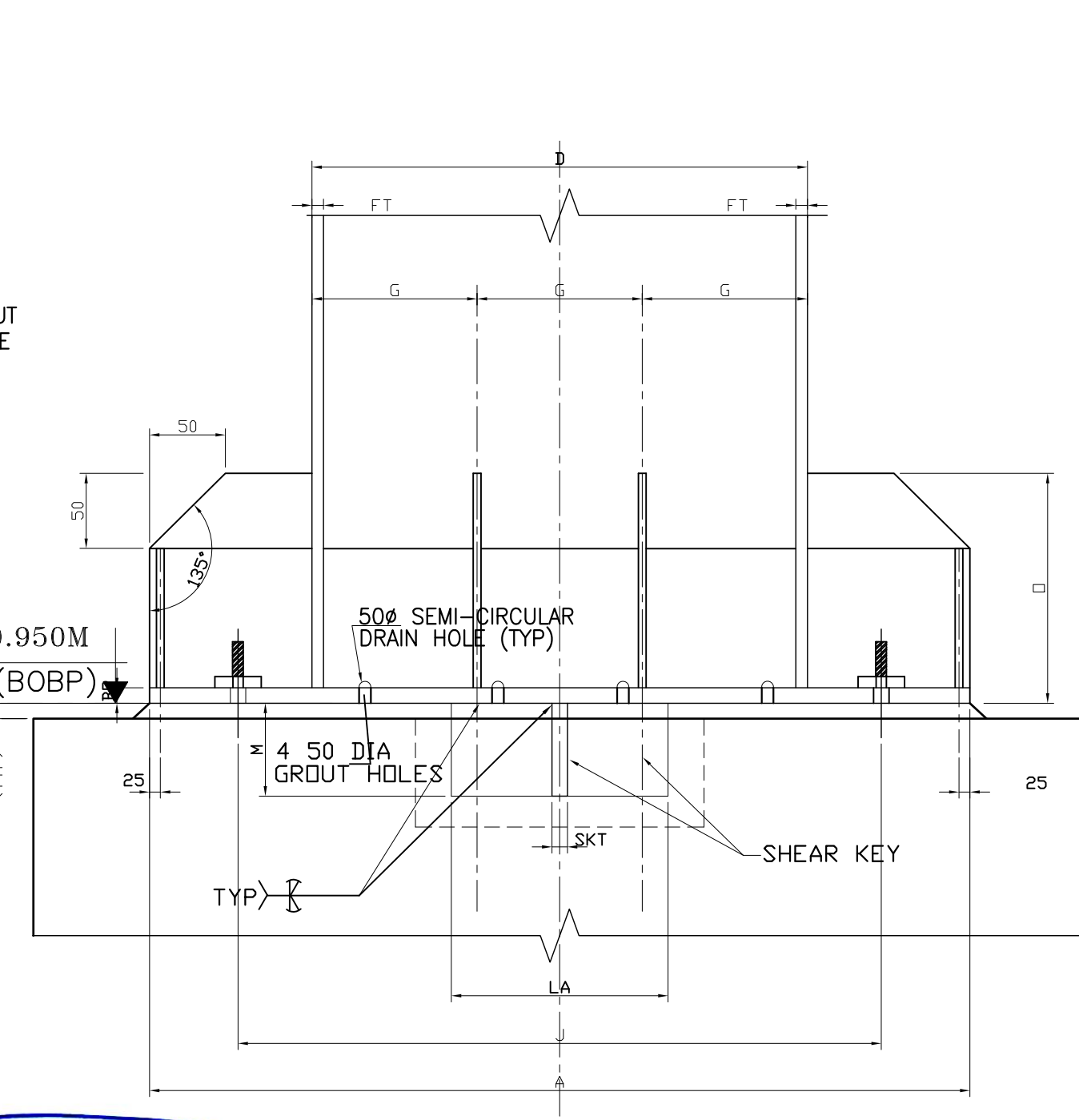
RC DET. OF PED. MKD. B1,C1,D1,B6,C6,D6



RC DET. OF PED. MKD. A1,E1,A6,E6,F6



TYP. DET. OF BASE PLATE MKD. BP-1



SECTION 7-7

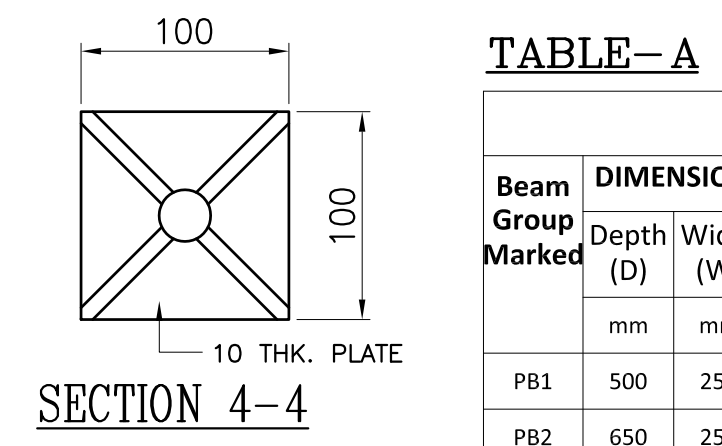
- NOTES
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
 - ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL(+) 5.60 M.
 - FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MATTREE-00-01UTX-LC-100200-PEM.
 - GRADE OF STEEL- E350, CONFORMING TO SA/IS-2062.
 - FOR GROUTING OF BASE PLATE REF. DRG. NO. MATTREE-00-01UMA-LB-100111-PEM.
 - CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
 - ALL WORK SHALL BE CARRIED OUT AS PER TECHNICAL SPECIFICATION, SCHEDULE OF ITEMS CONFORMING TO THE QUALITY CHECKS, SPECIFIED THEREIN AND IN FIELD QUALITY PLAN.
 - ALL WELDS SHALL BE 8mm FILLET CONTINUOUS UNLESS NOTED.

LEGEND

B/S	- BOTH SIDE
T.O.	- TOP OF
U.N.O.	- UNLESS NOTED OTHERWISE
HSFG	- HIGH STRENGTH FRACTION GRIP
TYP.	- TYPICAL
THK	- THICKNESS
CL	- CENTRE LINE
HT	- HIGH TENSILE
MC	- INDIAN STANDARD MEDIUM CHANNEL

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)	
THIS DRAWING MARKED (✓) IS RELEASED FOR	
COMMENTS/APPROVAL	
PLANNING/INFORMATION	
CONSTRUCTION	
STAMP ALL PREVIOUS REVISION AS SUPERSEDED	
ISSUED BY	SACHIN PANDIT
SIGNATURE	
DATE	29 November 2019

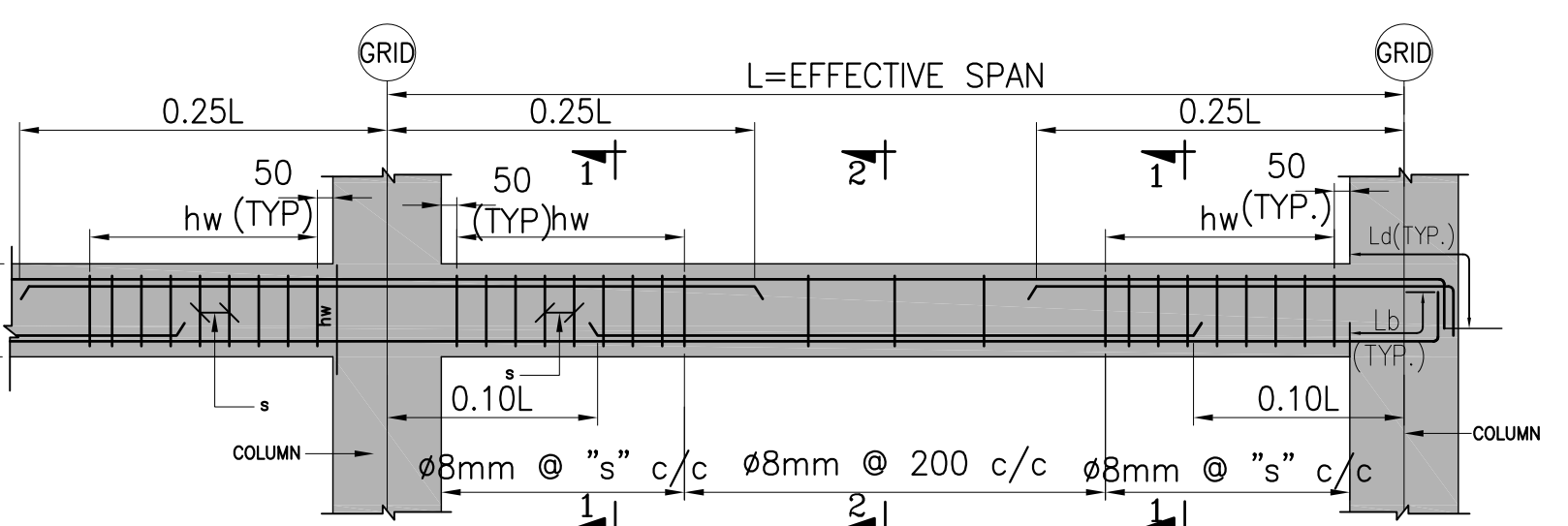
CONC. QTY. -220.0 CUM. (APPROX)



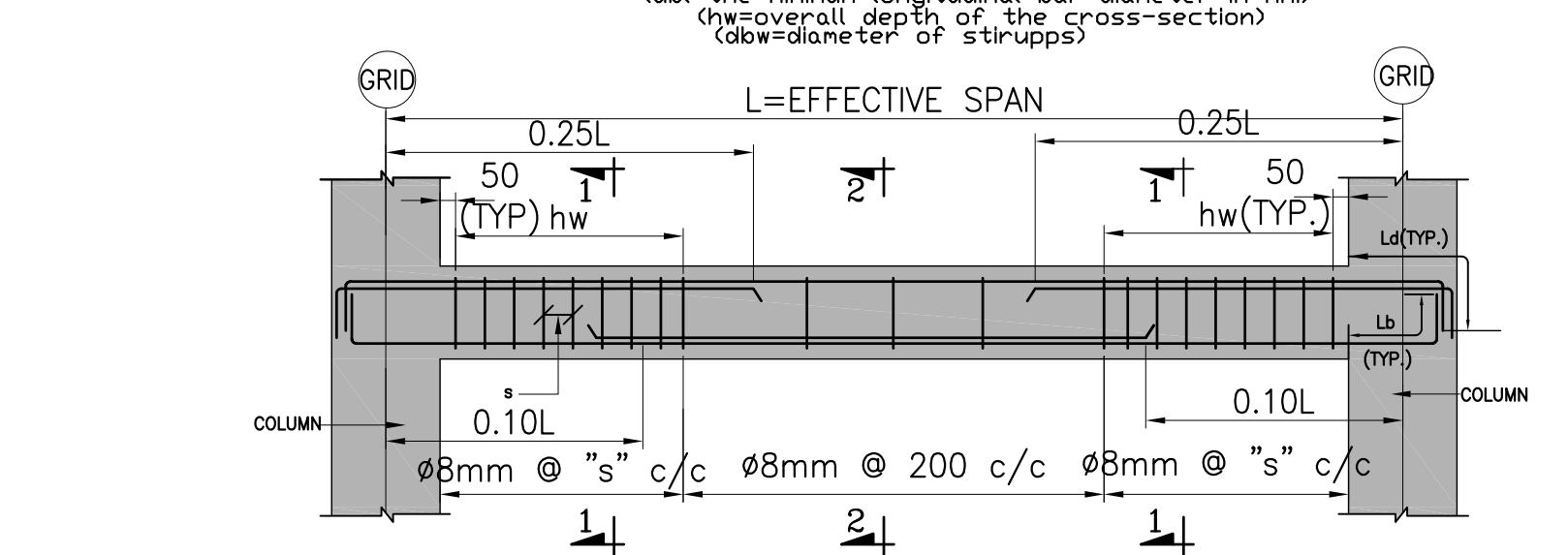
SECTION 4-4

TABLE-A

Beam Group Marked	DIMENSION (Depth (D) Width (W))	REINFORCEMENT					
		SPAN REINFORCEMENT			SUPPORTS REINFORCEMENT		
		Top	Bottom	Shear	Top	Bottom	Shear
PBI	500 250	2-25Y	2-25Y	2L-8Y 200	2-25Y	2L-8Y 150	
PBI2	650 250	2-25Y	4-25Y	2L-8Y 200	4-25Y	2-25Y	2L-8Y 150



TYPICAL DETAIL OF BEAM (CONTINUOUS SPAN)



TYPICAL DETAIL OF BEAM (SINGLE SPAN)

BASE PL. SCHEDULE

GROUP MKD.	BP-1	BP-2	BP-4	BP-5	REMARKS
COL. MKD.	A1, B1, C1, A2, C2, E5, A6, E6	F5,B6,F6	A3, A5, C3, C4, E4	C1,D1,C6,D6	
ITEM MKD.	BP				BASE PL WITH 4 NOS. GROUT PIPES AND # BOLT HOLE
NOS. OF BOLT	6	8	12	8	TOTAL NUMBER AND DIA OF BOLT
DIA OF BOLT	56	63	63	63	
FT	SAME AS COL. FL. PL. THICKNESS				PL. BUTT WELDED TO COL. FL. PL.
VT	REFER COLUMN SECTION GREYER SH. 2 OF 2D				COL. WEB PL.
FS	12	12	12	12	FL. STIFF. PL.
VS	12	12	12	12	WEB STIFF. PL.
VP	50	50	50	20	WASHER PL. WITH 1-# BOLT HOLE
FCS	12	12	12	12	FL. CROSS STIFF. PL.
VCS	12	12	12	12	WEB CROSS STIFF. PL.
SKT	28	28	40	40	SHEAR KEY
-	-	-	-	-	

BASE PL. SCHEDULE

DIM MKD.	BP-1	BP-2	BP-4	BP-5	REMARKS
A	1400	1400	1400	1400	BASE PLATE DIMENSIONS
B	1000	1000	1400	1000	
C	REFER COLUMN SCHEDULE				
D					
E	50	50	50	50	
F	300	225	216	225	
G	300	180	180	180	
J	1100	1100	1100	1100	C/C OF BOLT
K	300	225	216	225	C/C OF BOLT
L	800	800	1000	1000	SHEAR KEY
M	100	100	100	100	
N	120	120	120	120	WASHER PLATE
O	500	500	500	500	HT. OF FLANGE STIFF. PL.
P	500	500	500	500	HT. OF WEB STIFF. PL.

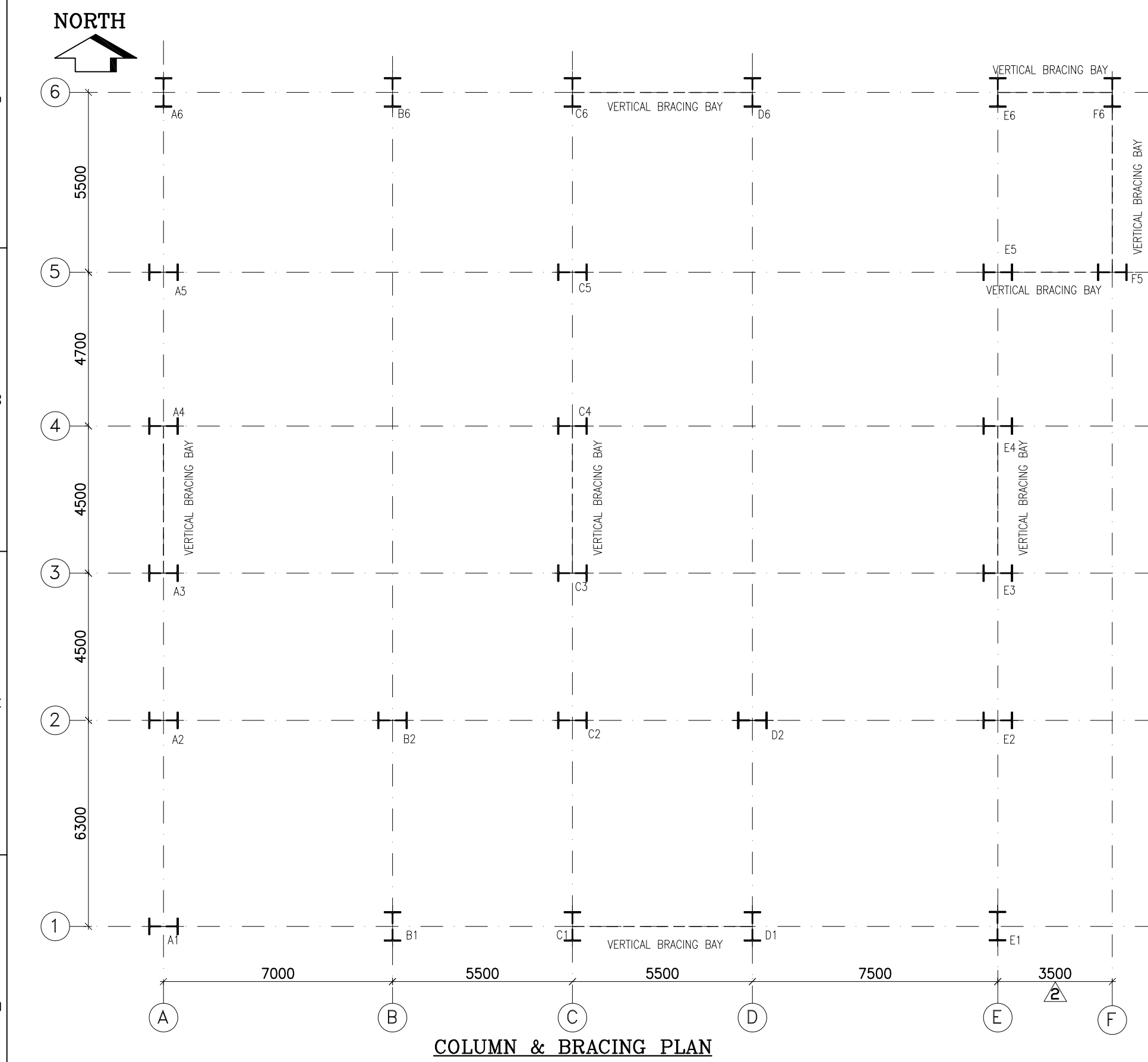
2	29/11/19	R.S.	PUNAM	AN	REVISED AS PER REVISED INPUT AND MKD. AS
1	05/07/19	PUNAM	SACHIN	AN	REVISED AS PER CUSTOMER COMMENTS
DATE	ALTERED	CHECKED	APPROVED	NOTE	

PROJECT 2x660MW MATTREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)

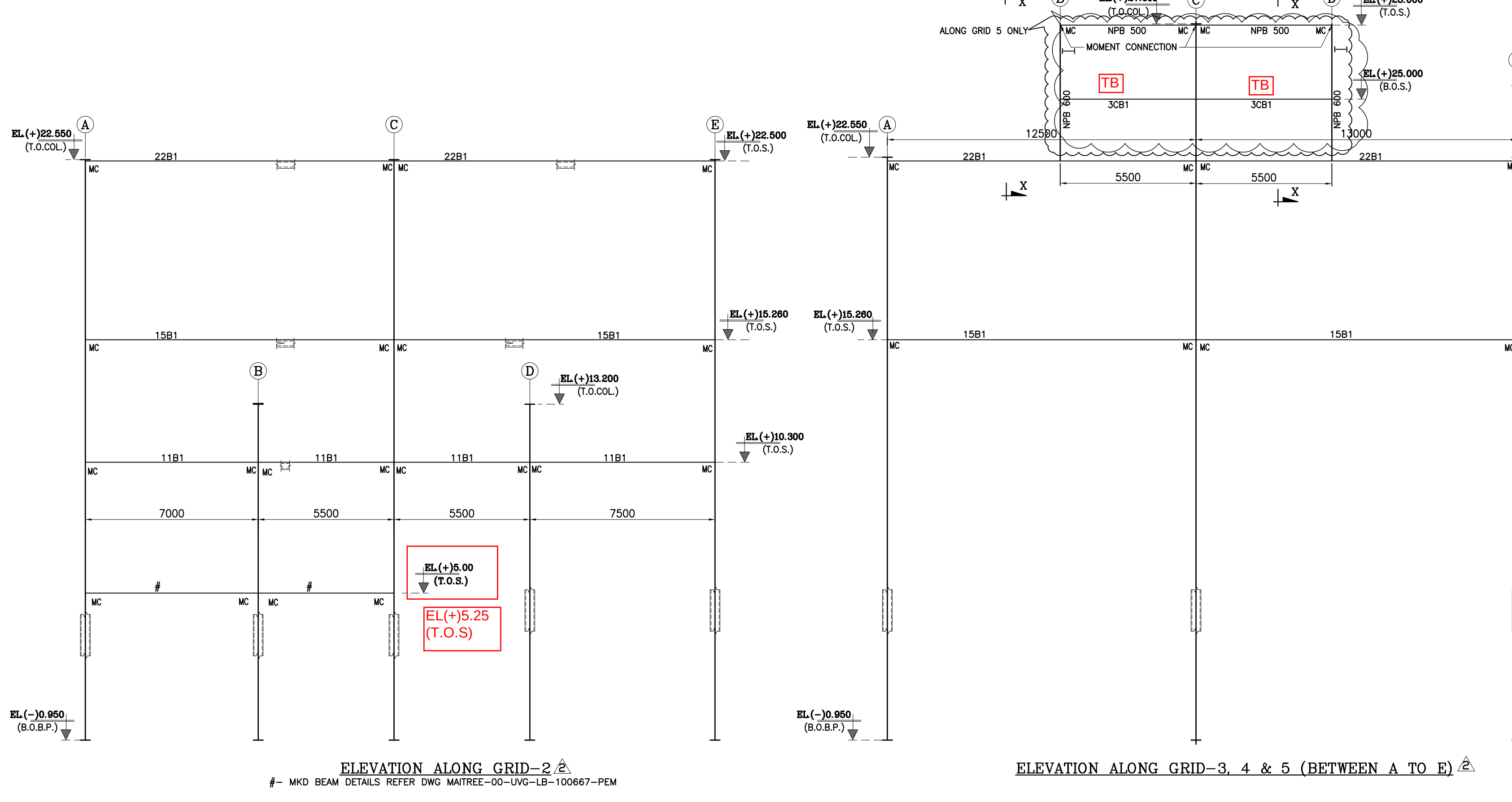
OWNER CONSULTANT:	OWNER:
FICTNER M/s FICTNER GmbH & Co KG, Stuttgart,GERMANY	BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH BARHAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA

DRAWN BY	27.12.2018	DK	DATE	27.12.2018	PUNAM
CHECKED BY	27.12.2018	S.S.B./S.P.	DATE	27.12.2018	A.N.
APPROVED BY	27.12.2018	A.N.	DATE	27.12.2018	A.N.
SUPERSEDED BY			DATE		
SIZE	A1	PROJECT NO.	421	FILE	
ANNEX		DRAWING NO.	MATTREE-00-UVG-LC-101667-PBM	REV	02

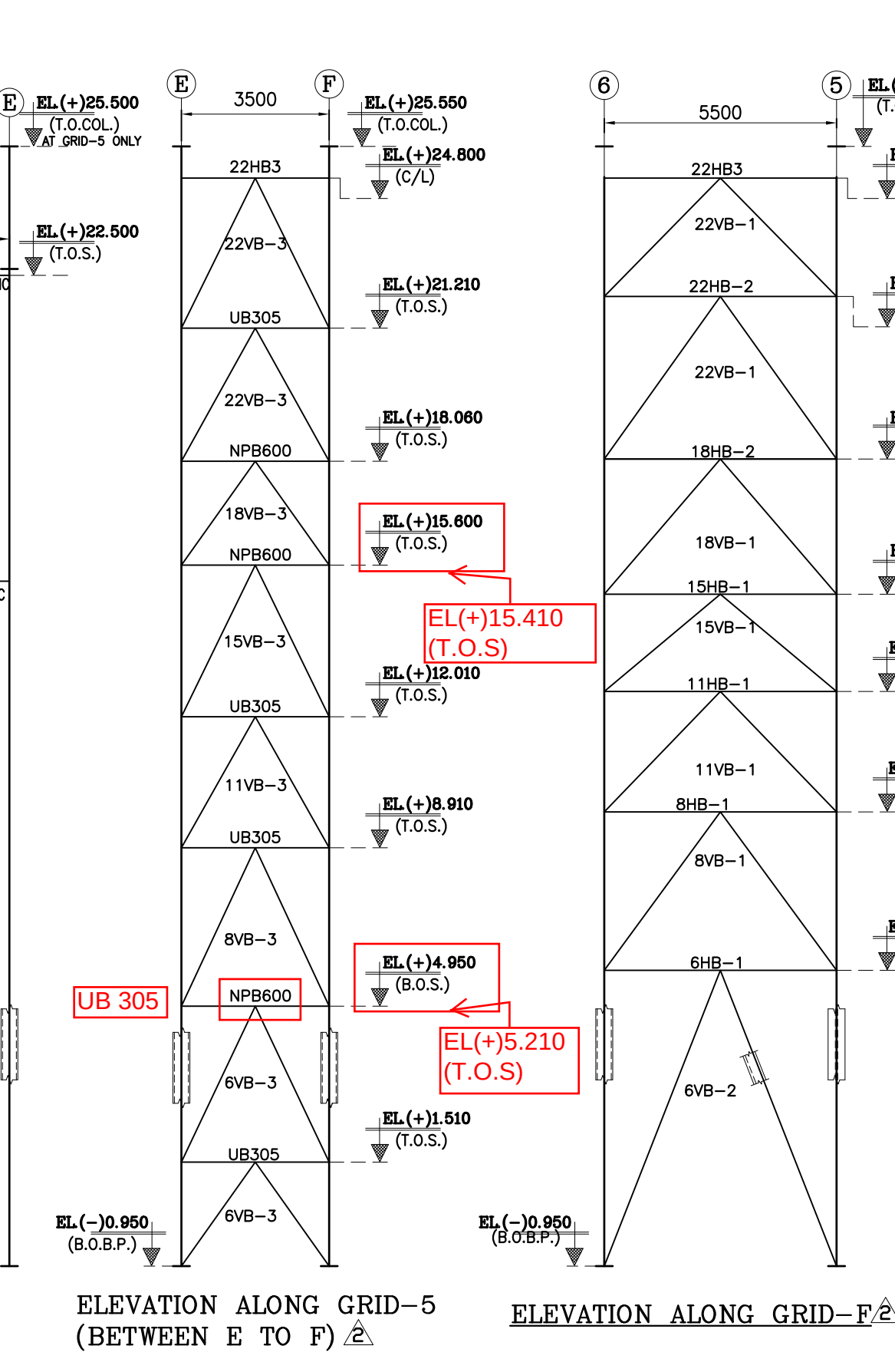
GYPSTUM DEWATERING BUILDING
BASE PLATE & PEDESTAL DETAILS



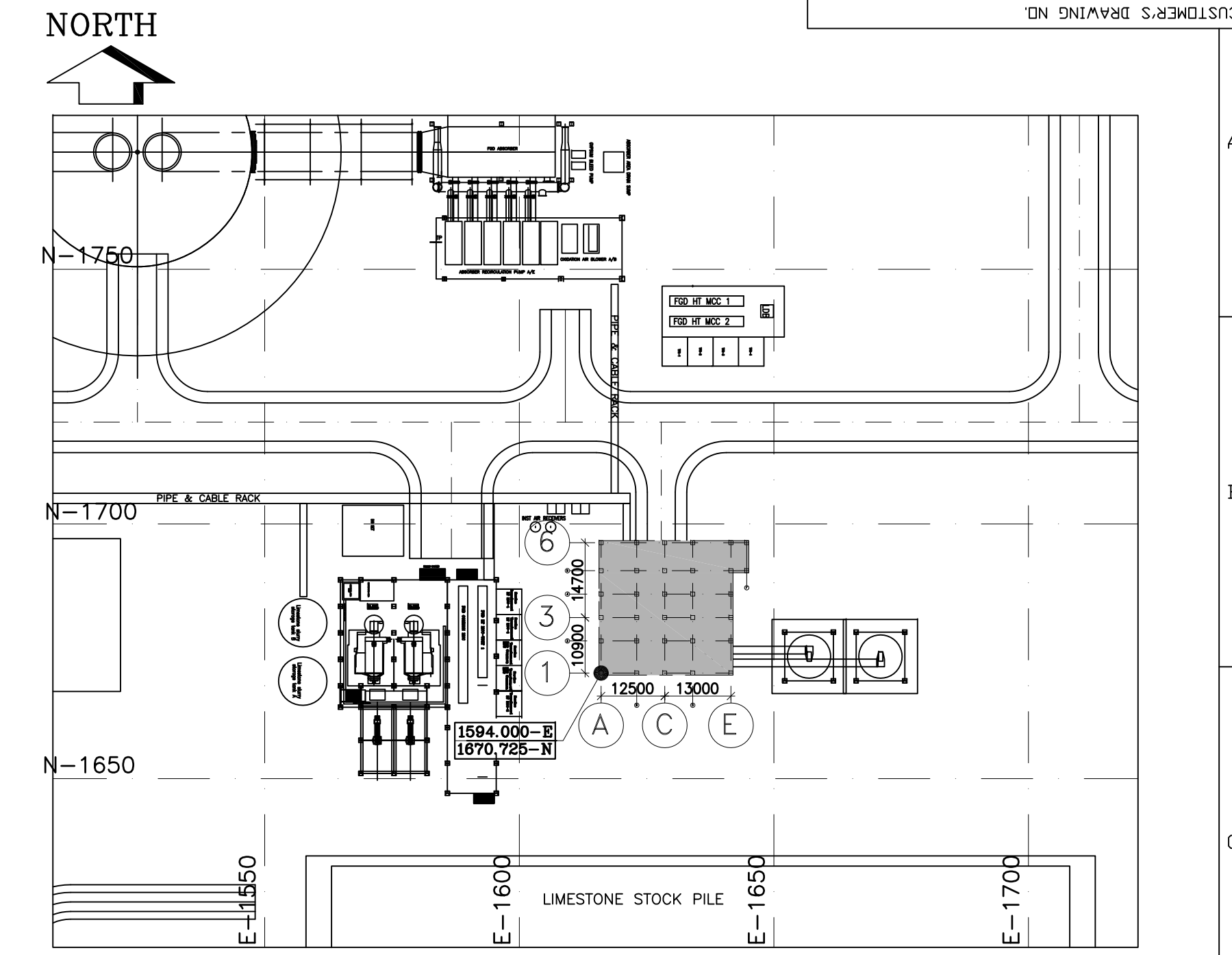
COLUMN & BRACING PLAN



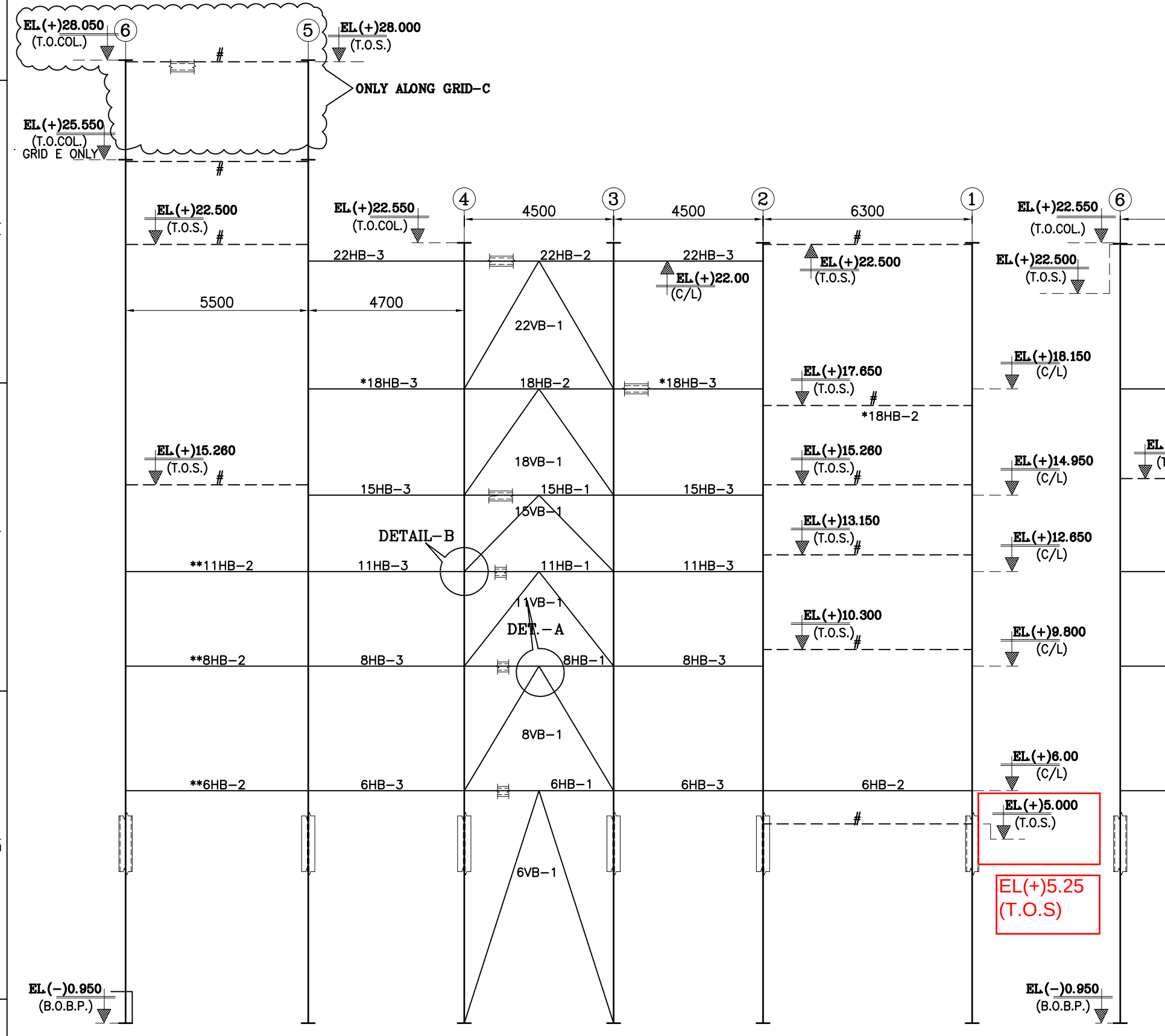
ELEVATION ALONG GRID-2, 3, 4 & 5 (BETWEEN A TO F)



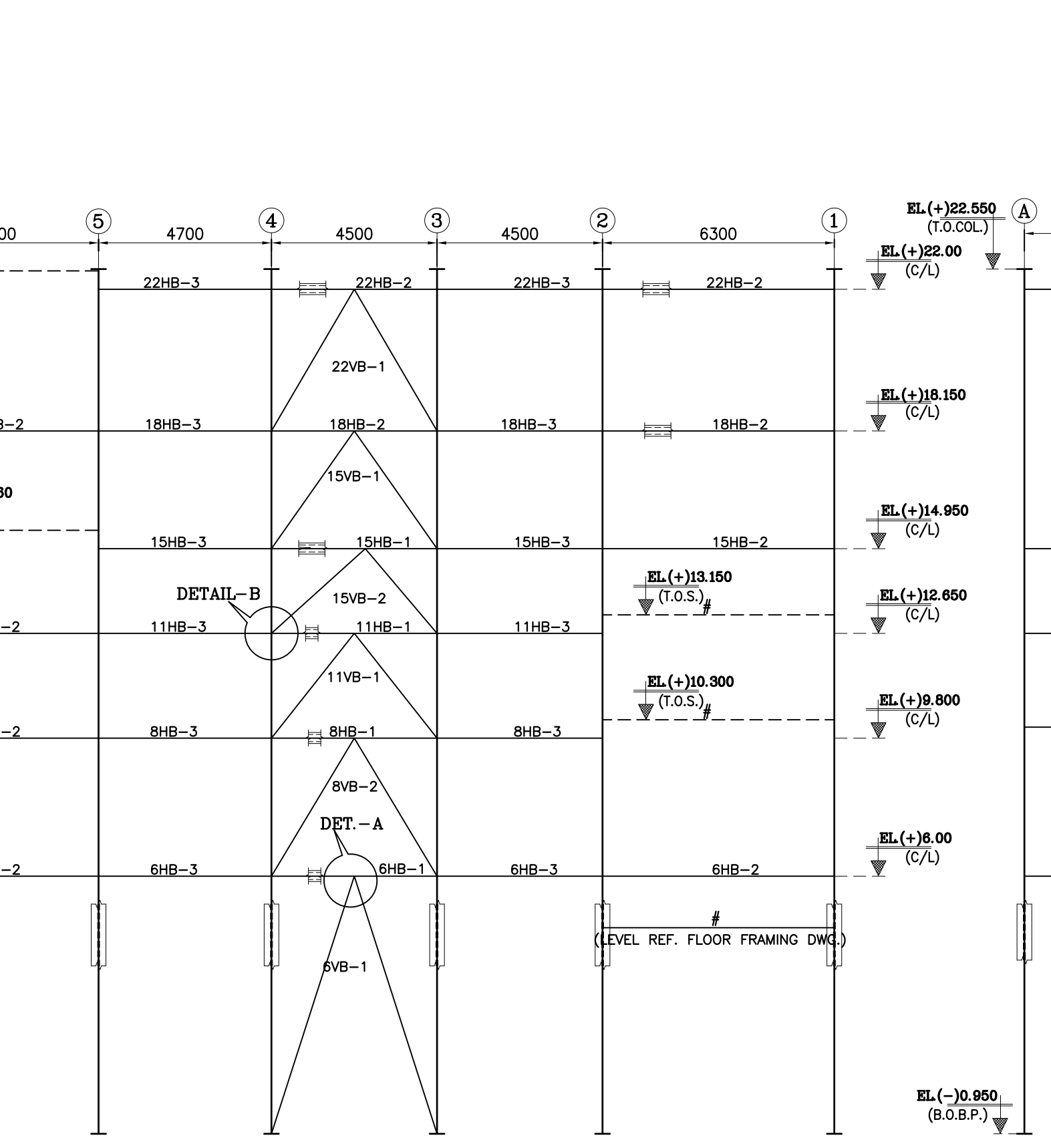
ELEVATION ALONG GRID-5 (BETWEEN E TO F)



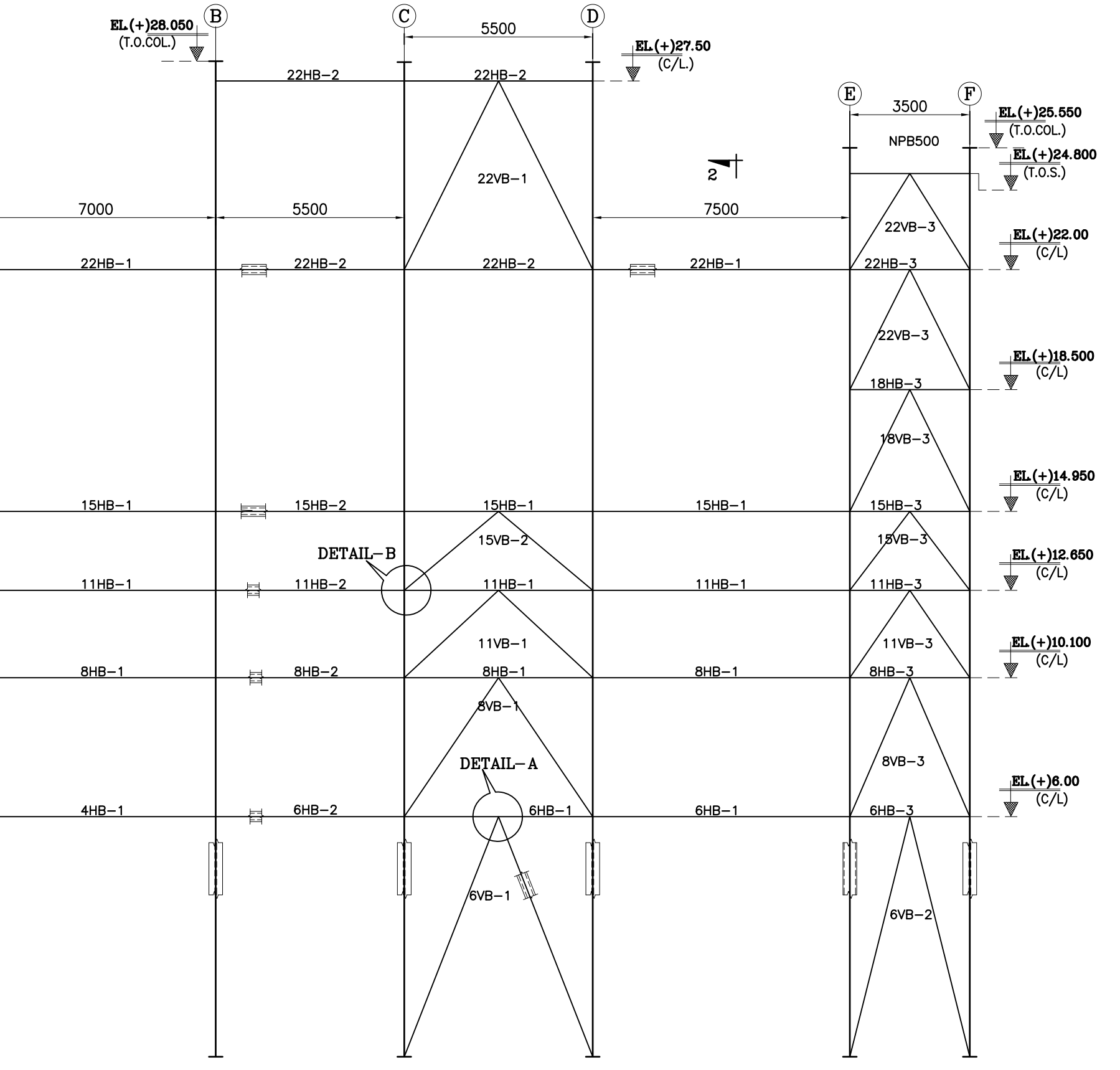
KEY PLAN



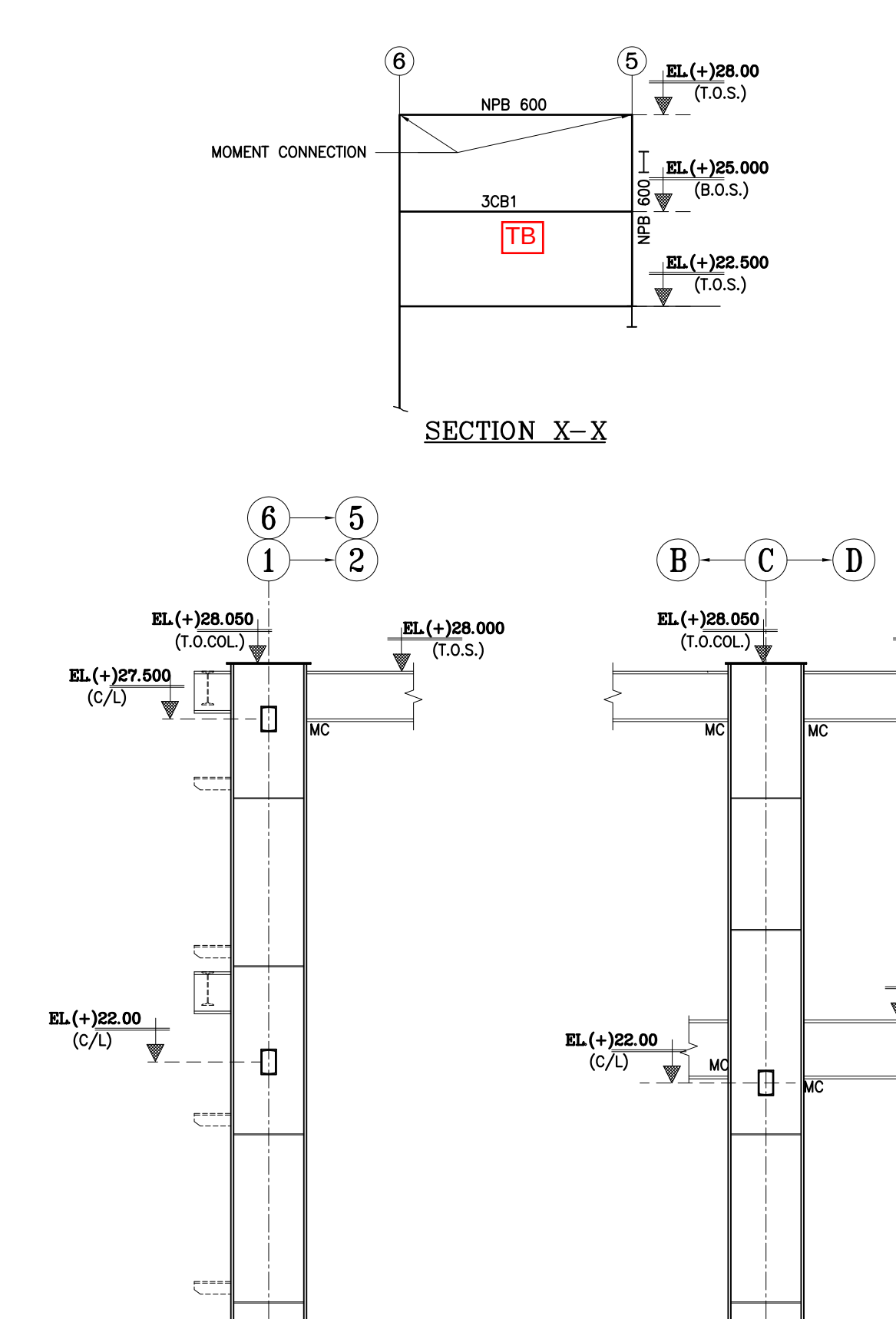
ELEVATION ALONG GRID-C&F



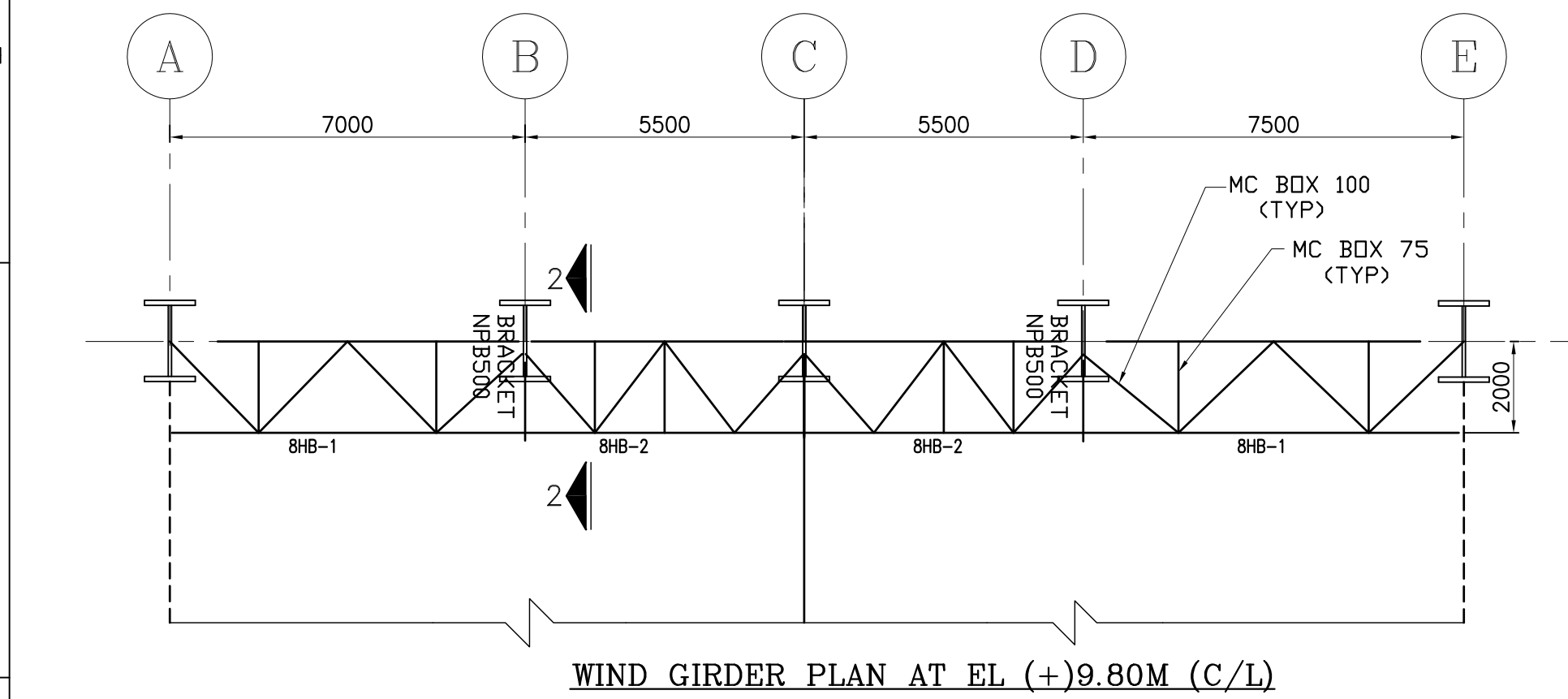
ELEVATION ALONG GRID-A



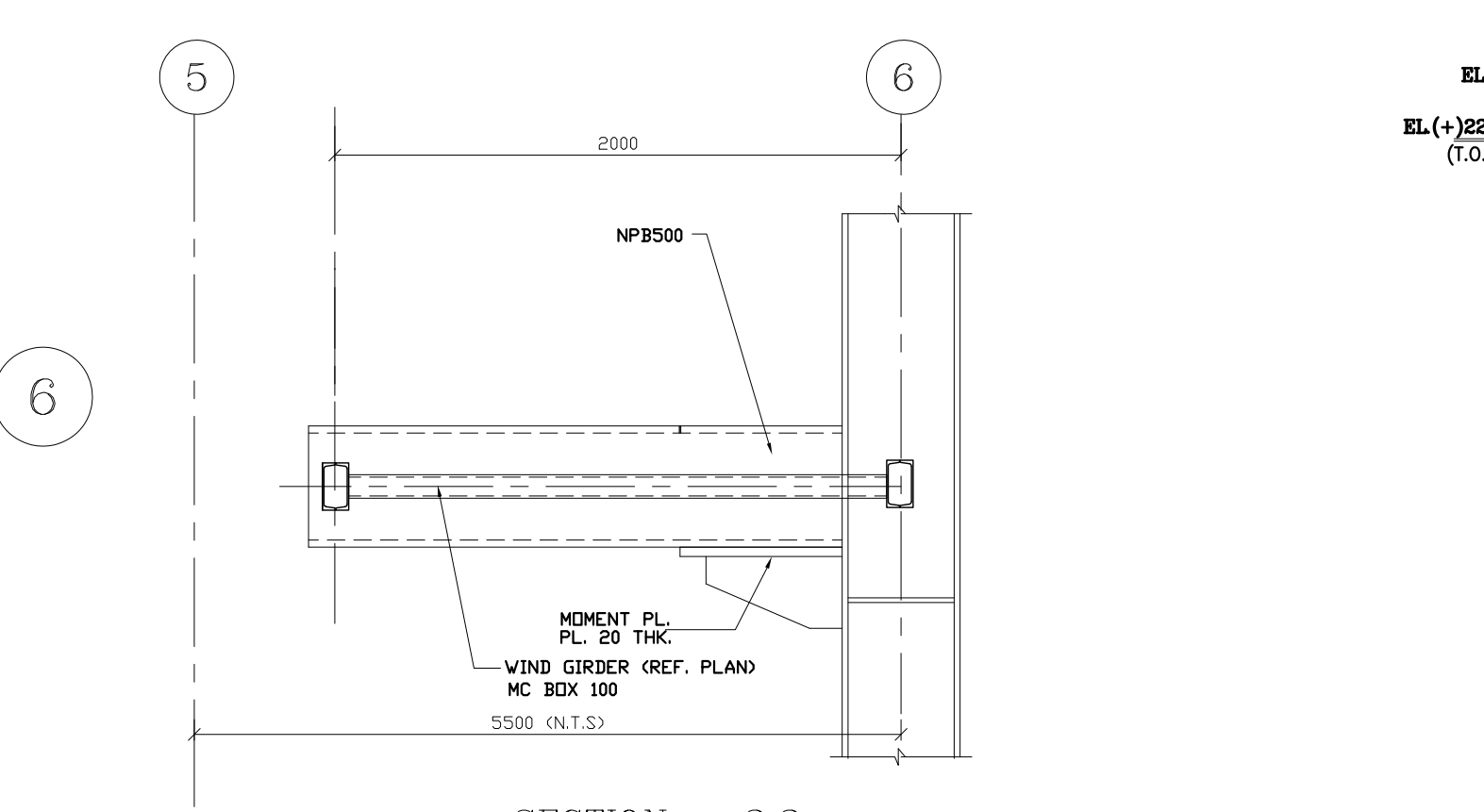
ELEVATION ALONG GRID-6



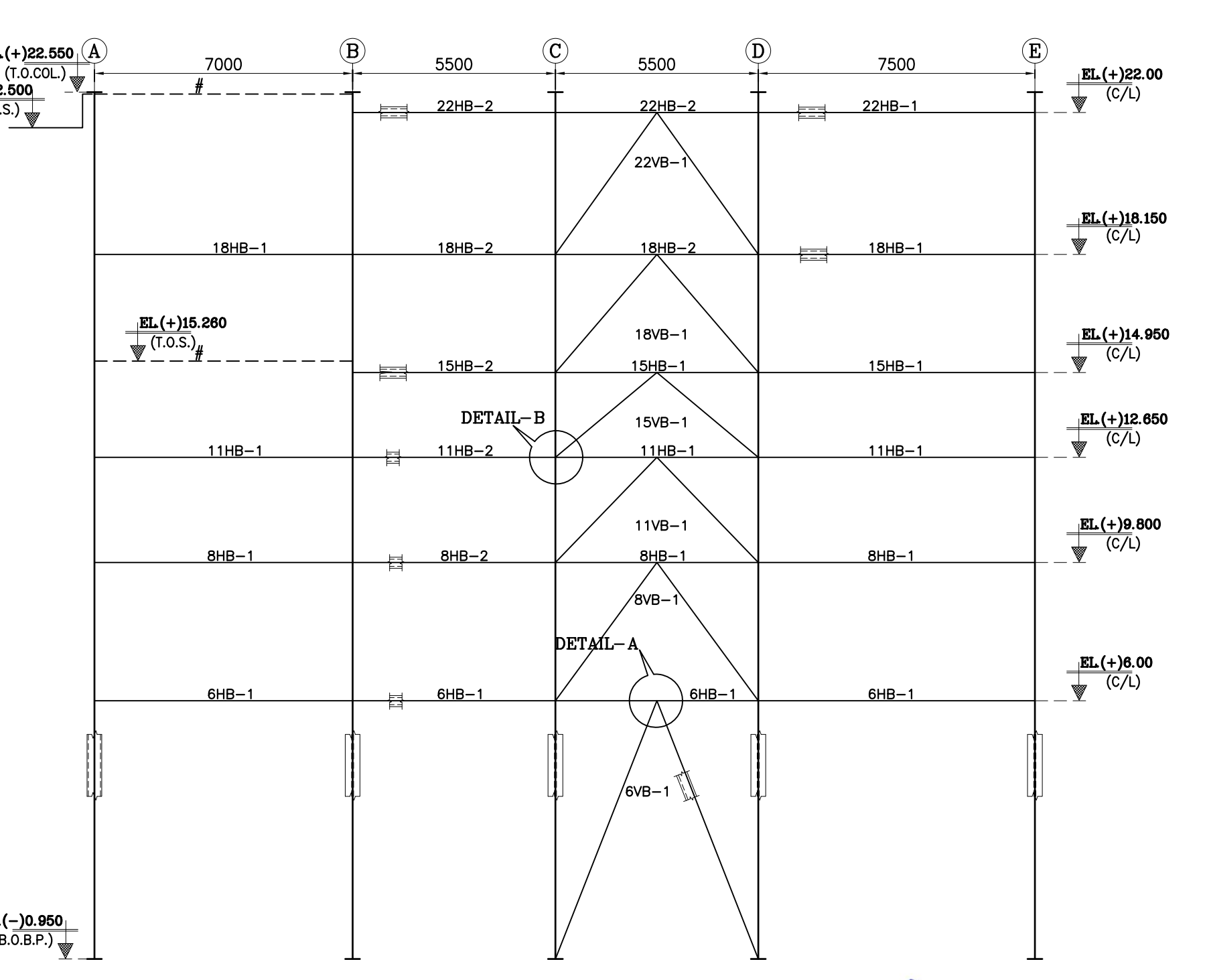
ELEVATION ALONG GRID-F



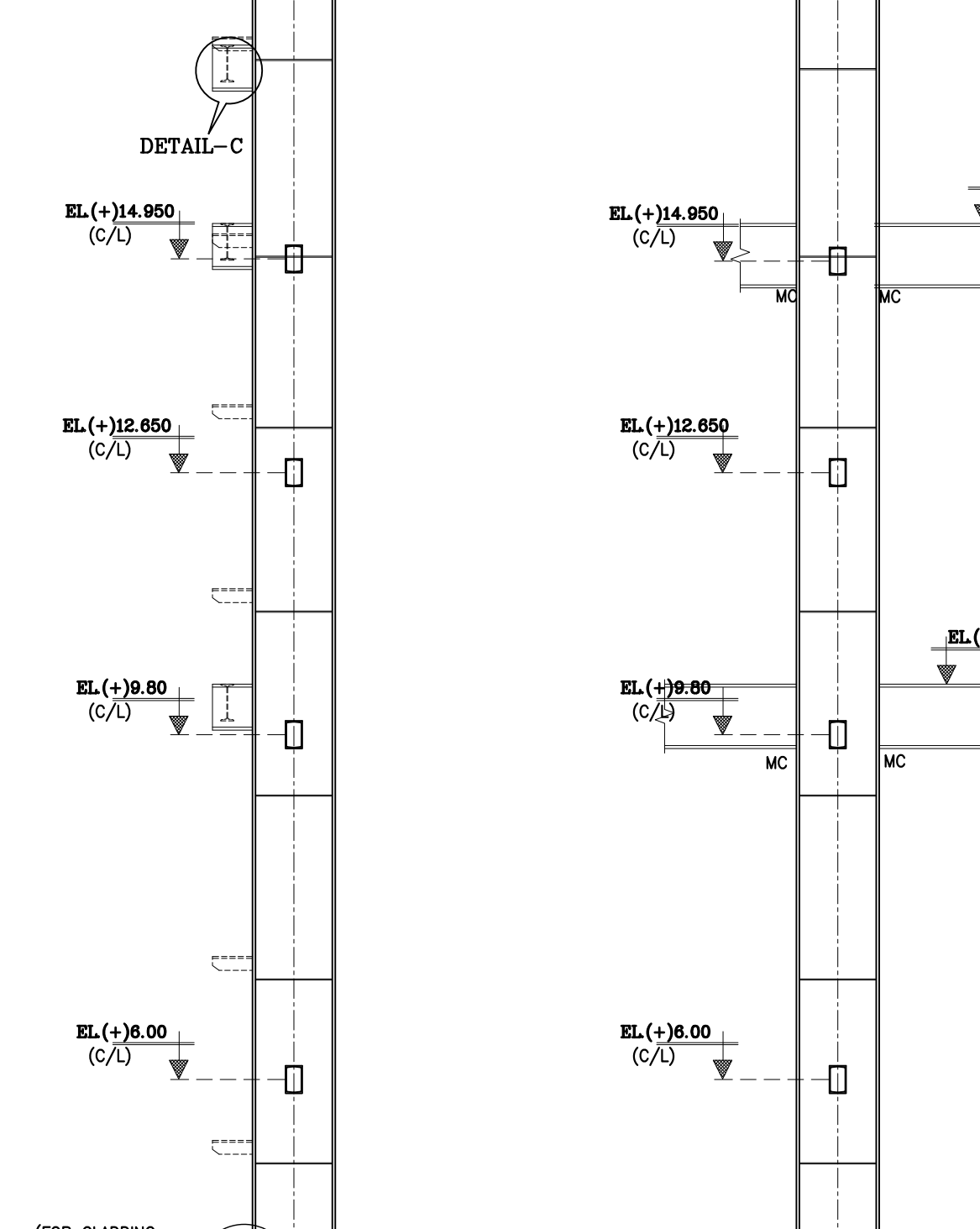
WIND GIRDER PLAN AT EL (+9.80M C/L)



SECTION - 2.2



ELEVATION ALONG GRID-1

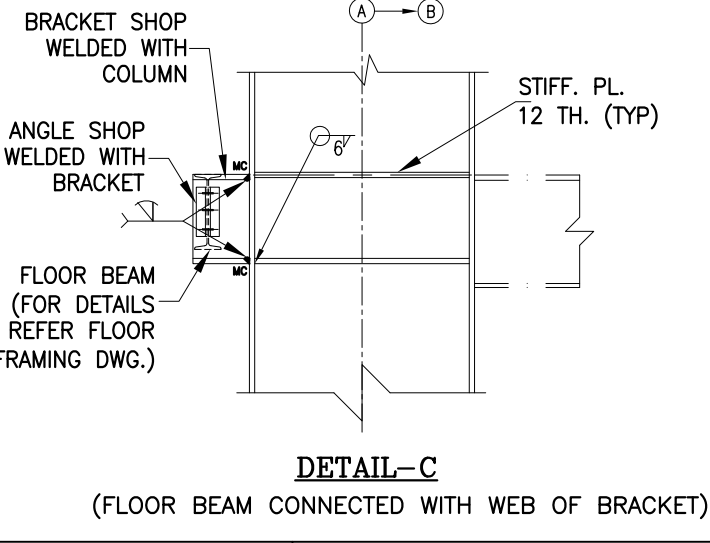


ELEVATION ALONG GRID-4

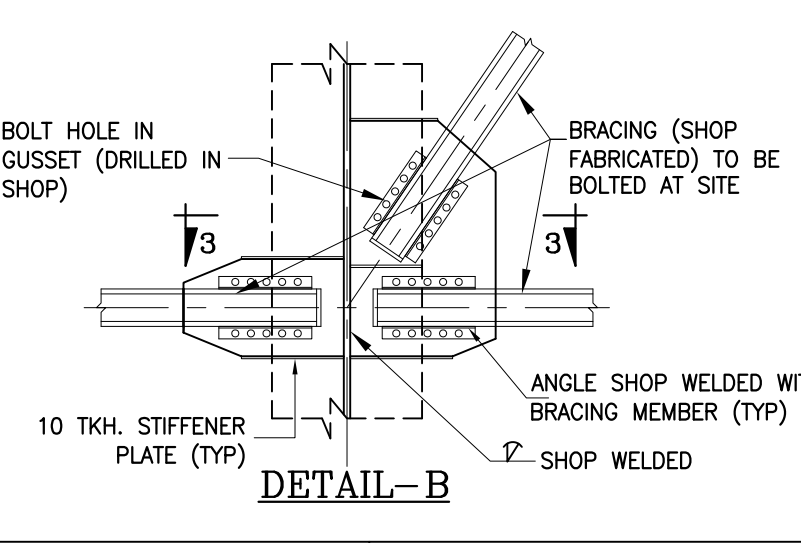
HORIZONTAL TIE SCHEDULE		
BRACING	BRACING SECTION	REMARKS
22HB-3	MC 150 BOX	
22HB-2	MC 200 BOX	
22HB-1	MC 250 BOX	
18HB-3	MC 150 BOX	
18HB-2	MC 200 BOX	
18HB-1	MC 250 BOX	
15HB-3	MC 150 BOX	
15HB-2	MC 200 BOX	
15HB-1	MC 250 BOX	
11HB-3	MC 150 BOX	
11HB-2	MC 200 BOX	
11HB-1	MC 250 BOX	
8HB-3	MC 150 BOX	
8HB-2	MC 200 BOX	
8HB-1	MC 250 BOX	

VERTICAL TIE SCHEDULE		
BRACING	BRACING SECTION	REMARKS
22HB-1	MC 200 BOX	
22HB-3	MC 150 BOX	
18HB-1	MC 200 BOX	
18HB-3	MC 150 BOX	
15HB-1	MC 250 BOX	
15HB-3	MC 150 BOX	
11HB-1	MC 250 BOX	
11HB-3	MC 150 BOX	
8HB-1	MC 250 BOX	
8HB-3	MC 150 BOX	
6HB-1	MC 400 BOX	
6HB-3	MC 250 BOX	

TRANSVERSE GIRDER SCHEDULE		
ORDER	DETAILS	ORDER ON ROWS AT ELEVATION
1181	1000 300 25 20 2	EL+10.30 EL+15.450 EL+22.500 EL+28.00 EL+25.00
1581	1000 450 32 20 2	2, 3, 4, 5 2, 3, 4, 5
181	500 250 20 16	5, 6, C, D



DETAIL-A



DETAIL-B

COLUMN SCHEDULE		
ELEVATION	FLANGE	WEB
EL(+122.550)	FW	CD
EL(+122.000)	FW	CD
EL(+118.150)	FW	CD
EL(+114.950)	FW	CD
EL(+112.650)	FW	CD
EL(+10.800)	FW	CD
EL(+9.800)	FW	CD
EL(+8.800)	FW	CD
EL(+7.800)	FW	CD
EL(+6.800)	FW	CD
EL(+5.800)	FW	CD
EL(+4.800)	FW	CD
EL(+3.800)	FW	CD
EL(+2.800)	FW	CD
EL(+1.800)	FW	CD
EL(+0.800)	FW	CD
EL(-0.200)	FW	CD
EL(-1.200)	FW	CD
EL(-2.200)	FW	CD
EL(-3.200)	FW	CD
EL(-4.200)	FW	CD
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EL(-98.200)	FW	CD
EL(-99.200)	FW	CD
EL(-100.200)	FW	CD

Checked & Approved by
Prof. B. NAGESWARA RAO
Structural Engineering Laboratory
Department of Civil Engineering
IIT Madras, Chennai - 600 026

NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL.(+) 5.60 M.
- FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MATTREE-00-01UTX-LC-100200-PEM.
- GRADE OF STEEL - E350, CONFORMING TO SA/IS-2062.
- ALL SITE CONNECTION SHALL BE BOLTED TYPE.
- CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- ALL WORK SHALL BE CARRIED OUT AS PER TECHNICAL SPECIFICATION, SCHEDULE OF ITEMS CONFORMING TO THE QUALITY CHECKS SPECIFIED THEREIN AND IN FIELD QUALITY PLAN.
- ALL WELDS SHALL BE 8mm FILLET CONTINUOUS UNLESS NOTED.

LEGEND

B/S - BOTH SIDE	
T.O. - TOP OF	
U.N.O. - UNLESS NOTED OTHERWISE	
HSFG - HIGH STRENGTH FRACTION GRIP	
TYP. - TYPICAL	
THK - THICKNESS	
CL - CENTRE LINE	
HT - HIGH TENSILE	
MC - INDIAN STANDARD MEDIUM CHANNEL	

BHEL-PROJECT ENGINEERING MANAGEMENT (PVT.) LTD.

THIS DRAWING MARKED (✓) IS RELEASED FOR

COMMENTS/ APPROVAL

PLANNING/ INFORMATION

CONSTRUCTION

STAMP ALL PREVIOUS REVISION AS SUPERSEDED

ISSUED BY: SACHIN PANDIT

SIGNATURE: _____

DATE: 29 November 2019

TOTAL TONNAGE - 460.0MT. (APPROX)

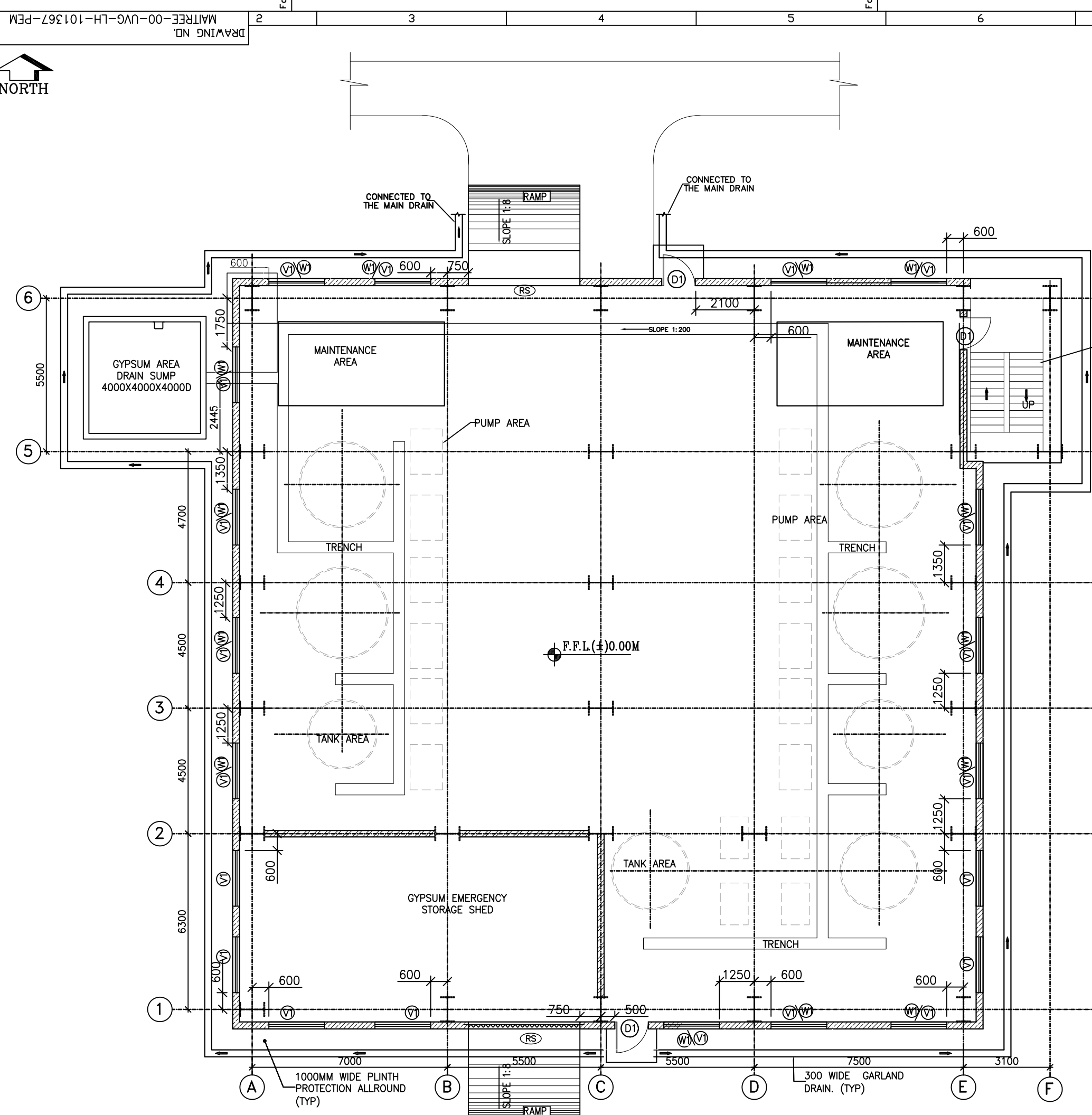
2	29/11/19	R.S.	PUNAM	AN	REVISED AS PER REVISED INPUT AND MKD. AS.
1	05/07/19	PUNAM	SACHIN	AN	REVISED AS PER CUSTOMER COMMENTS
	DATE	ALTERED	CHECKED	APPROVED	NOTE

PROJECT
2x660MW MATTREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH
(EPC MAIN PLANT PACKAGE)

OWNER CONSULTANT: FICTNER M/s FICTNER GmbH & Co KG, Stuttgart, GERMANY		OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH BARHAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA		SCALE: SHEET 1 2 OF 2
DRAWN BY: 27.12.2018 DK	DATE	NAME	TITLE	
DESIGN BY: 27.12.2018 PUNAM				
CHECKED BY: 27.12.2018 S.S.B./S.P.				
APPROVED BY: 27.12.2018 A.N.				
SUPERSEDED BY:				
SIZE: A1	PROJECT NO: 421	FILE:		
ANNEX:	DRAWING NO: MATTREE-00-UVG-LC-101667-PEM	REV 02		

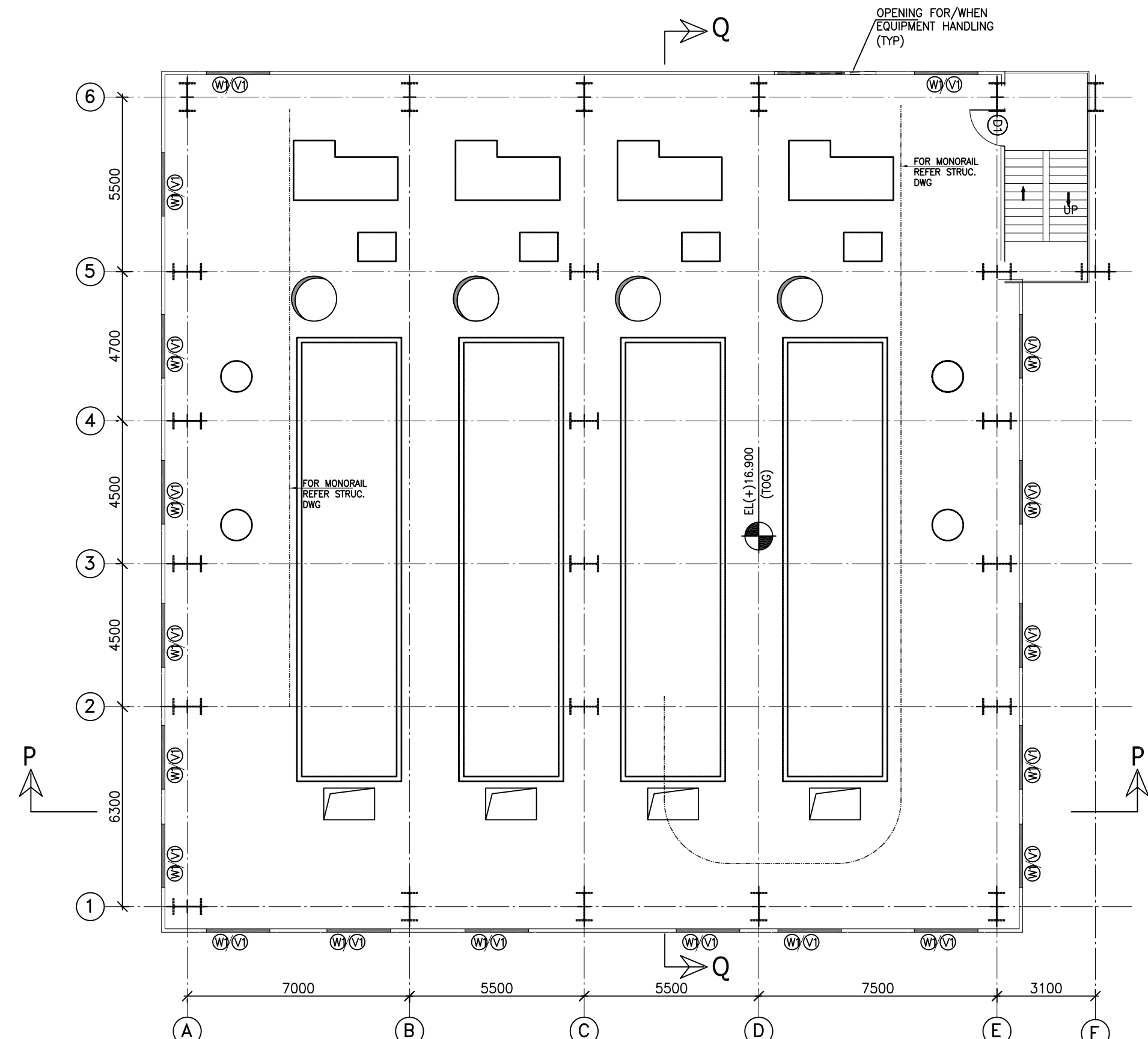
BHEL- PROJECT ENGINEERING MANAGEMENT (CIVIL)
RELEASED FOR CONSTRUCTION

ISSUED BY AMAN SHARMA
DATE 10-05-2021



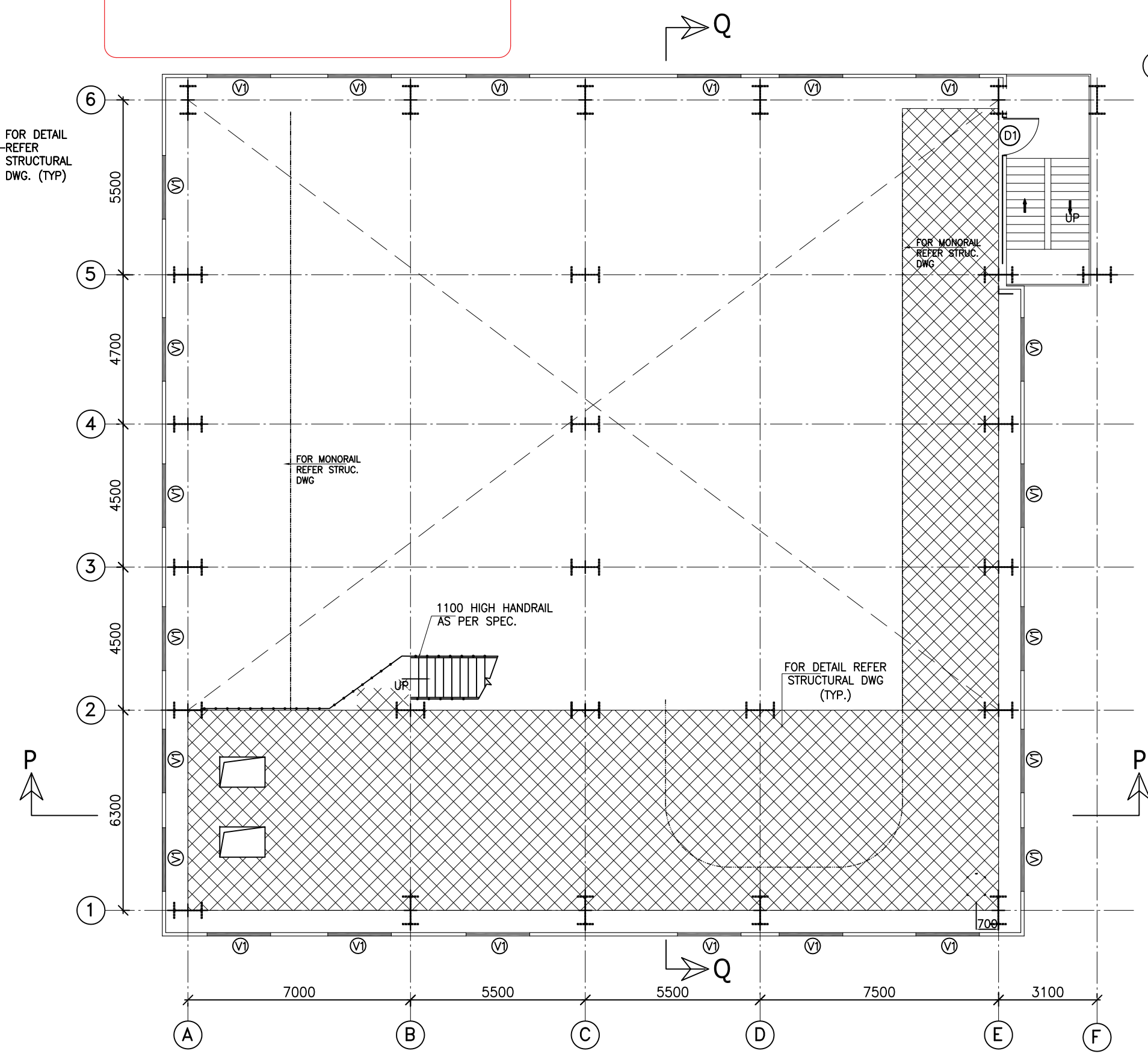
PLAN AT (±)0.00M FFL

FOR CO-ORDINATE REFER FOUNDATION DWG.
(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LH-101467-PEM(SH-2)



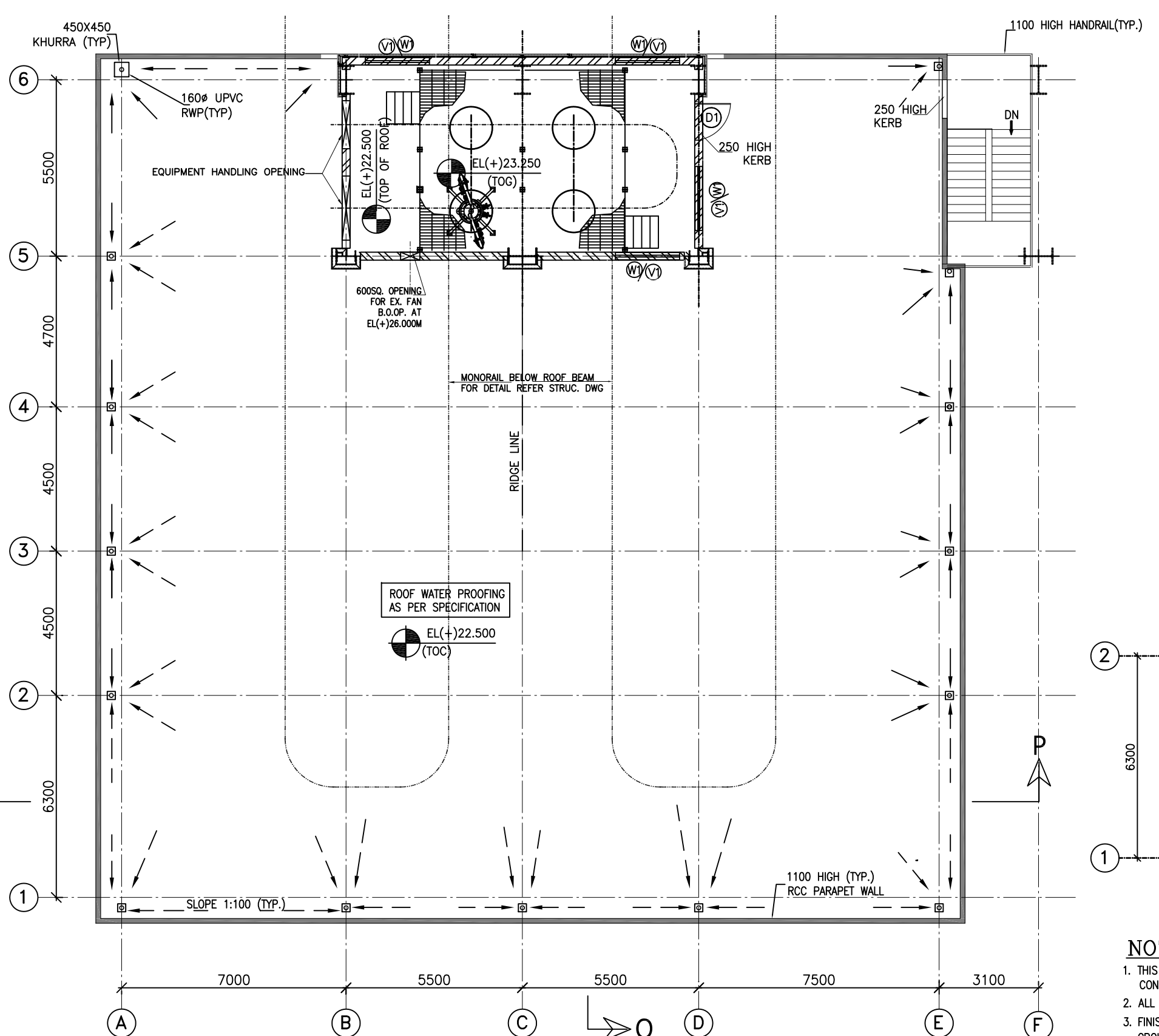
PLAN AT (+)15.260M (TOS)

(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LH-101467-PEM(SH-2)



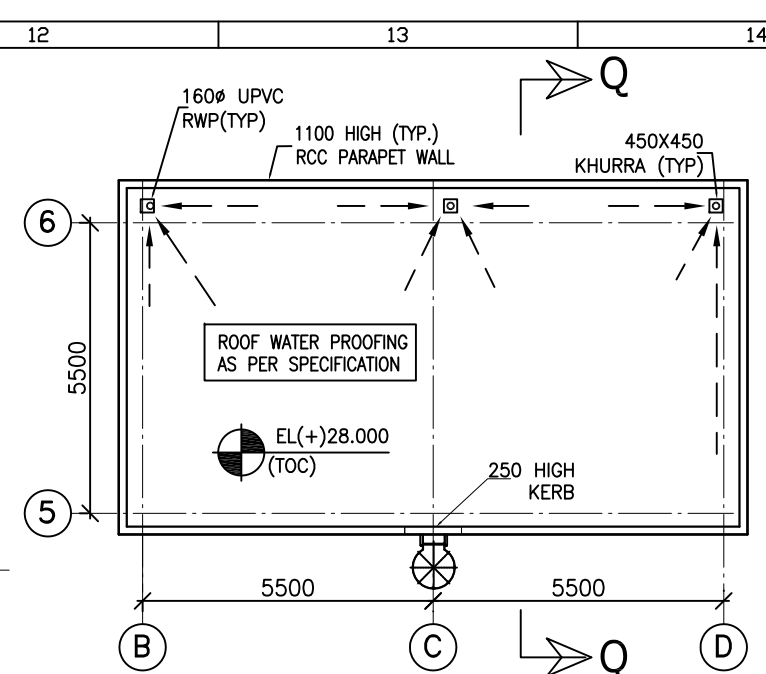
PLAN AT (+)10.300M TOS

(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LH-101467-PEM(SH-2)

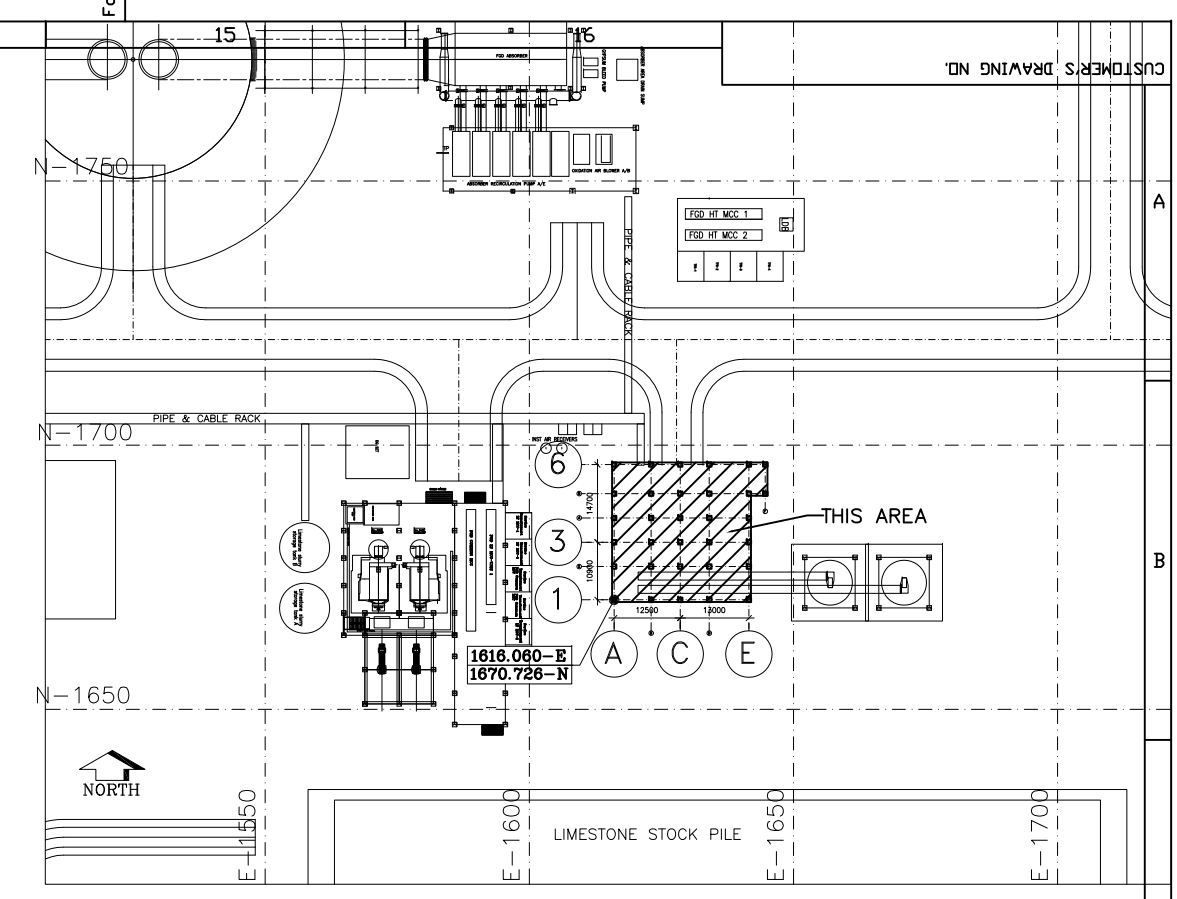


PLAN AT (+)22.500M TOS

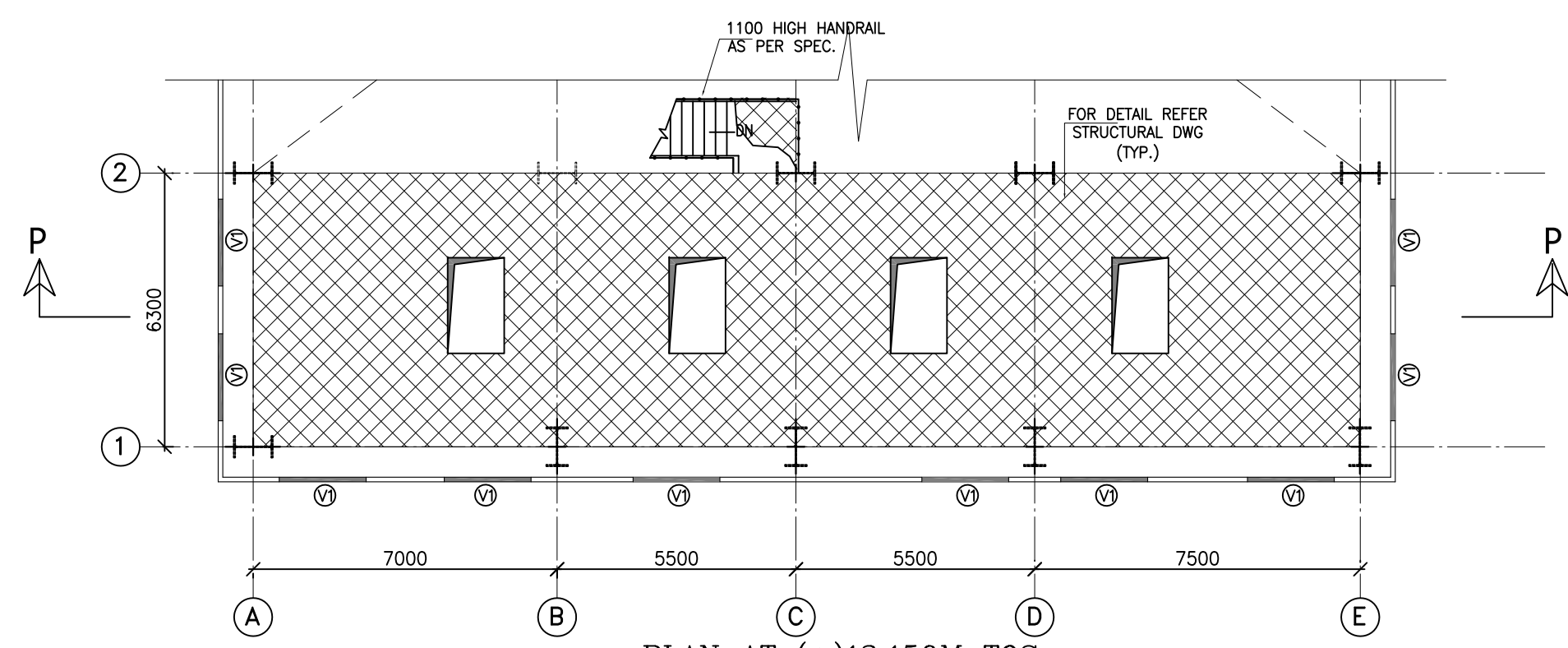
(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LH-101467-PEM(SH-2)



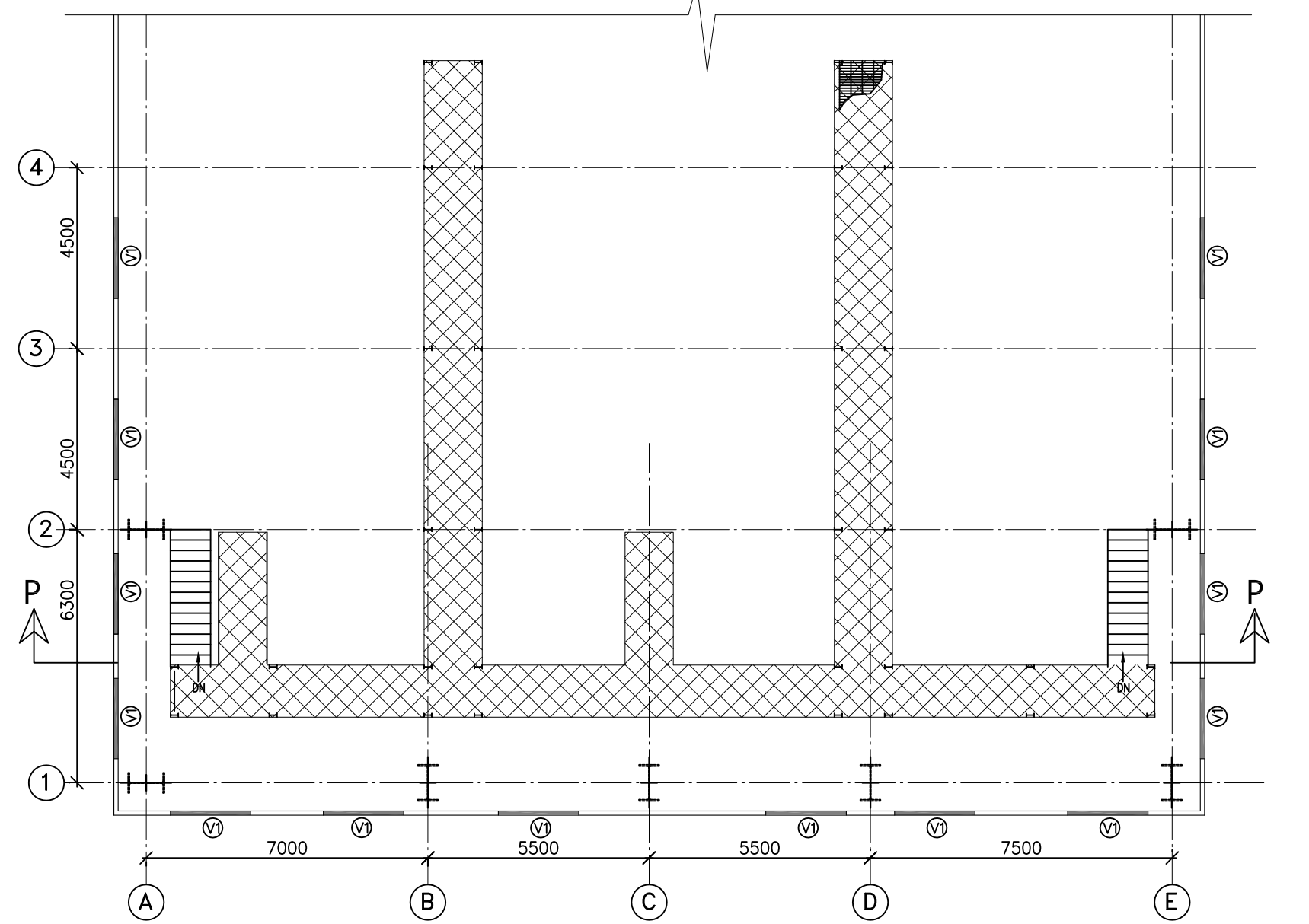
PLAN AT (+)28.00M TOS



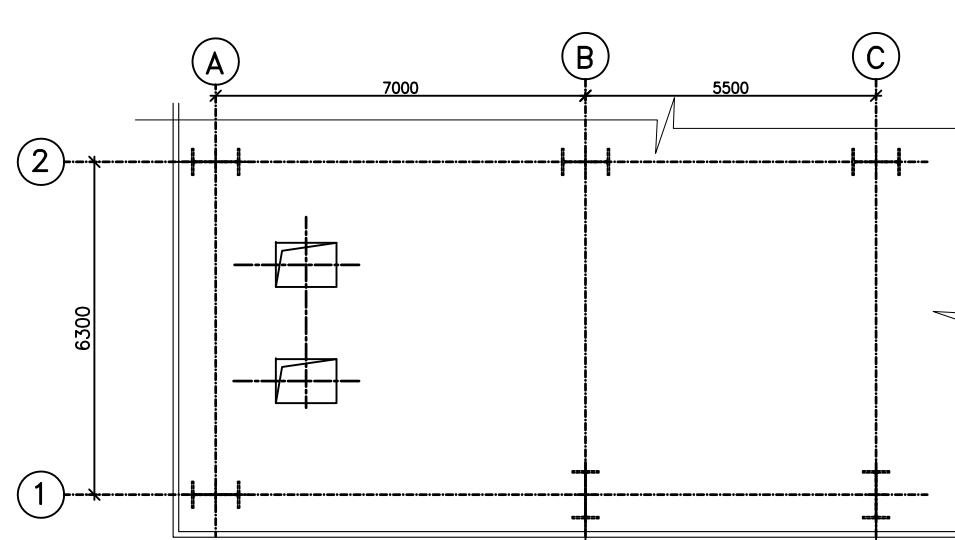
KEY PLAN



PLAN AT (+)13.150M TOS



PLAN AT EL(+17.650M (T.O.G.) TYP.



PLAN AT EL(+5.000M (TOS) TYP.

LEGENDS:-

- 250 THK AREATED CONC BLOCK
- 230 THK BRICK WALL
- 150 HIGH CURB WALL
- RB - ROOF BEAM
- C - CENTER LINE
- E - ELEVATION
- FFL - FINISHED FLOOR LEVEL
- TOC - TOP OF CONCRETE
- TYP - TYPICAL
- UNO - UNLESS NOTED OTHERWISE

NOTES:-

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL(+5.0M
- ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.

REFERENCE DRAWINGS:-

- MAITREE-00-MA-LD-120001-PEM---PLOT PLAN
- MAITREE-00-UMA-LH-103111-PEM---GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
- MAITREE-00-UVG-LB-101567-PEM---GYPSUM DEWATERING BUILDING FOUNDATION GA & RC DETAILS
- MAITREE-0-HYM-MH-200188-RPT---GYPSUM DEWATERING BUILDING
- MAITREE-00-UVG-LH-101467-PEM---ARCH ELEVATION SH 2
- MAITREE-00-UVG-LH-101467-PEM---ARCH ELEVATION SH 1

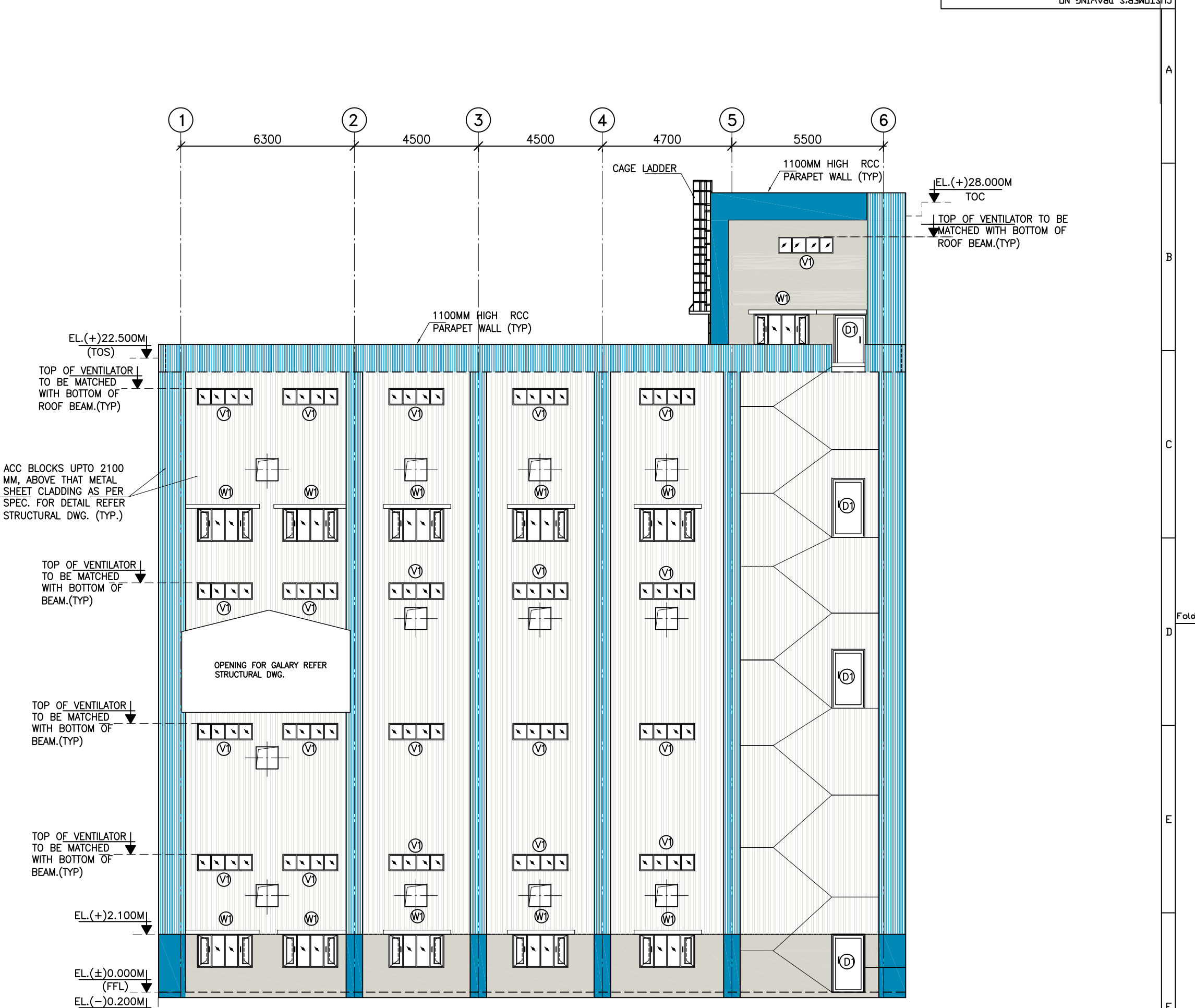
02	07.05.2021	USHA	SB	SP	VENTILATION & ELECTRICAL OPENING ADDED.
01	28.02.20	USHA	SB	SP	DRAWING REVISED AS PER CUSTOMER COMMENT.
	DATE	ALTERED	CHECKED	APPROVED	NOTE
PROJECT 2x680MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICHTNER M & T FICHTNER GmbH & Co KG Stuttgart, GERMANY			OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA		
DRAWN BY	DATE	NAME	TITLE	SCALE	SHEET
DESIGN BY	12.11.2018	BHASKAR		1:100	1 OF 1
CHECKED BY	12.11.2018	SP			
APPROVED BY	12.11.2018	AN			
SUPERSEDED BY					
SYSTEM					
PROJECT NO.	421	FILE			
DRAWING NO.	MAITREE-00-UVG-LH-101367-PEM	REV	02		



ELEVATION ALONG GRID-1
(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LB-100667-PEM(SH-1/2 &3)



ELEVATION ALONG GRID-A
(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LB-100667-PEM(SH-1/2 &3)



ELEVATION ALONG GRID-F
(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LB-100667-PEM(SH-1/2 &3)

Copyright and Confidentiality: This drawing is the property of BH&E Engineering Management (Civil) and is not to be used or reproduced in any way without the written consent of the company.

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
RELEASED FOR CONSTRUCTION
ISSUED BY: AMAN SHARMA
DATE: 10-05-2021

- NOTES:-**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
 3. FINISH FLOOR LEVEL = RL (+)5.60 M. CORRESPONDS TO PLANT EL. 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL (+)5.0M
 4. ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.
- REFERENCE DRAWINGS :-**
1. MAITREE-00-MA-LD-120001-PEM---PLOT PLAN
 2. MAITREE-00-UMA-LH-103111-PEM---GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
 3. MAITREE-00-UVG-LB-101567-PEM---GYPSUM DEWATERING BUILDING FOUNDATION GA & RC DETAILS
 4. MAITREE-0-HIM-MH-200188-RPT---GYPSUM DEWATERING BUILDING
 5. MAITREE-00-UVG-LH-101467-PEM---ARCH ELEVATION SH 2
 6. MAITREE-00-UVG-LH-101367-PEM---ARCH PLAN



ELEVATION ALONG GRID-6
(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LB-100667-PEM(SH-1/2 &3)



3D VIEW - 1



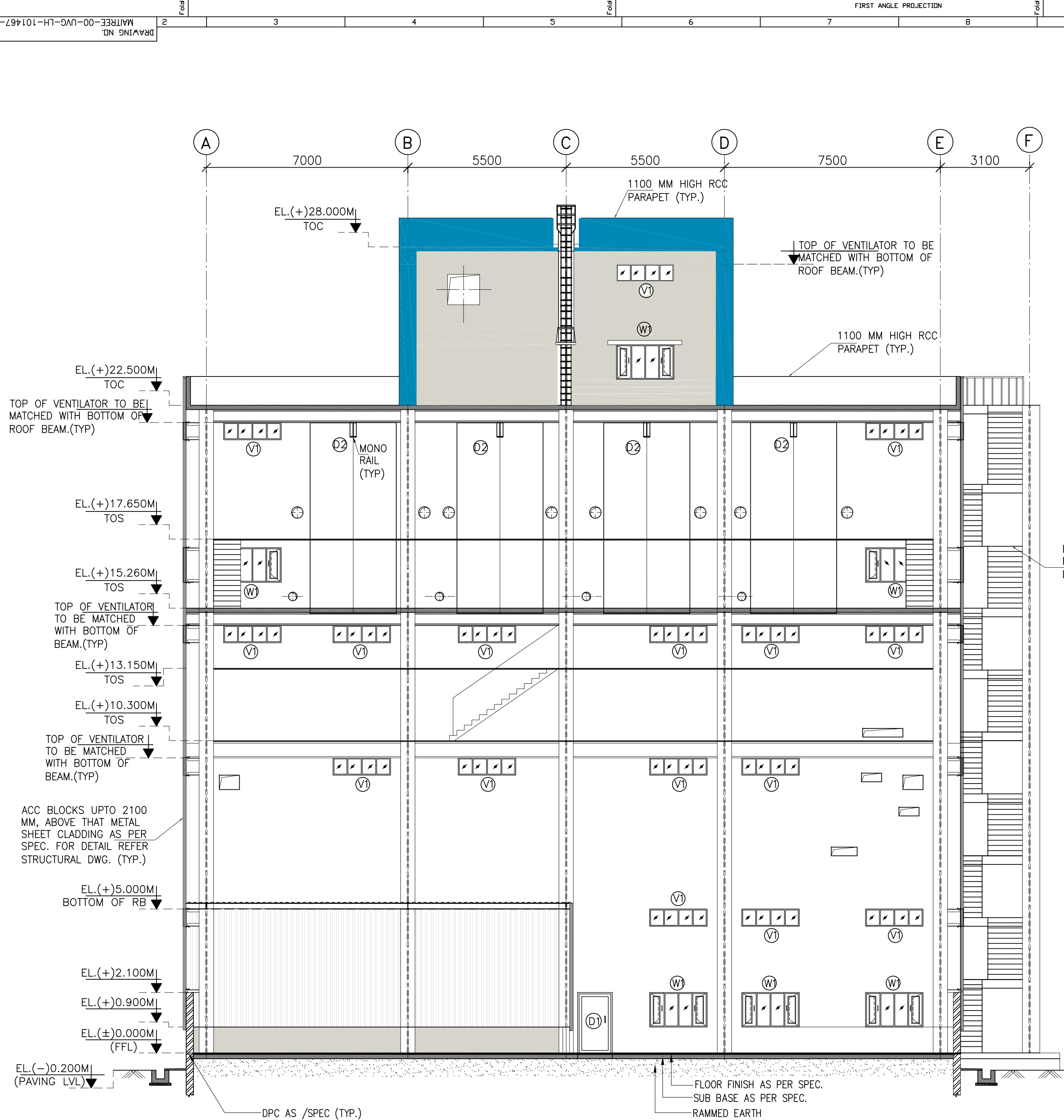
3D VIEW - 2

- LEGENDS:-**
- R.S. - ROLLING SHUTTER
C - CENTER LINE
EL - ELEVATION
FFL - FINISHED FLOOR LEVEL
TOC - TOP OF CONCRETE
TYP - TYPICAL
UNO - UNLESS NOTED OTHERWISE
- METAL CLADDING COLOUR CODE
BRICK WALL COLOUR PAINT CODE
- RAL COLOR 9002
---RAL COLOR 5012

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
THIS DRAWING MARKED (✓) IS RELEASED FOR
COMMENTS/APPROVAL
PLANNING/INFORMATION
CONSTRUCTION
STAMP ALL PREVIOUS REVISION AS SUPERSEDED

NAME	SACHIN PANDIT
SIGNATURE	
DATE	07.05.2021

02	07.05.2021	USHA	SB	SP	VENTILATION & ELECTRICAL OPENING ADDED.
01	28.02.20	USHA	SB	SP	DRAWING REVISED AS PER CUSTOMER COMMENT.
DATE	ALTERED	CHECKED	APPROVED	NOTE	
PROJECT	2x680MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)				
OWNER	BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH				
OWNER CONSULTANT	FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart, GERMANY				
DESIGN BY	DATE	NAME	SCALE	TITLE FLUE GAS DESULPHURISATION GYPSUM DEWATERING BUILDING-ARCH ELEVATIONS	
CHECKED BY	13.11.2018	SP	1:100		
APPROVED BY	13.11.2018	AN	SHEET 1 OF 2		
SUPERSEDED	13.11.2018	AN	REV 02		
SYSTEM	ANNEX	PROJECT NO.	421	FILE	
DRAWING NO.	MAITREE-00-UVG-LH-101467-PEM				



SECTION P-P

(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LB-100667-PEM(SH-1/2 &3)

NOTES: –

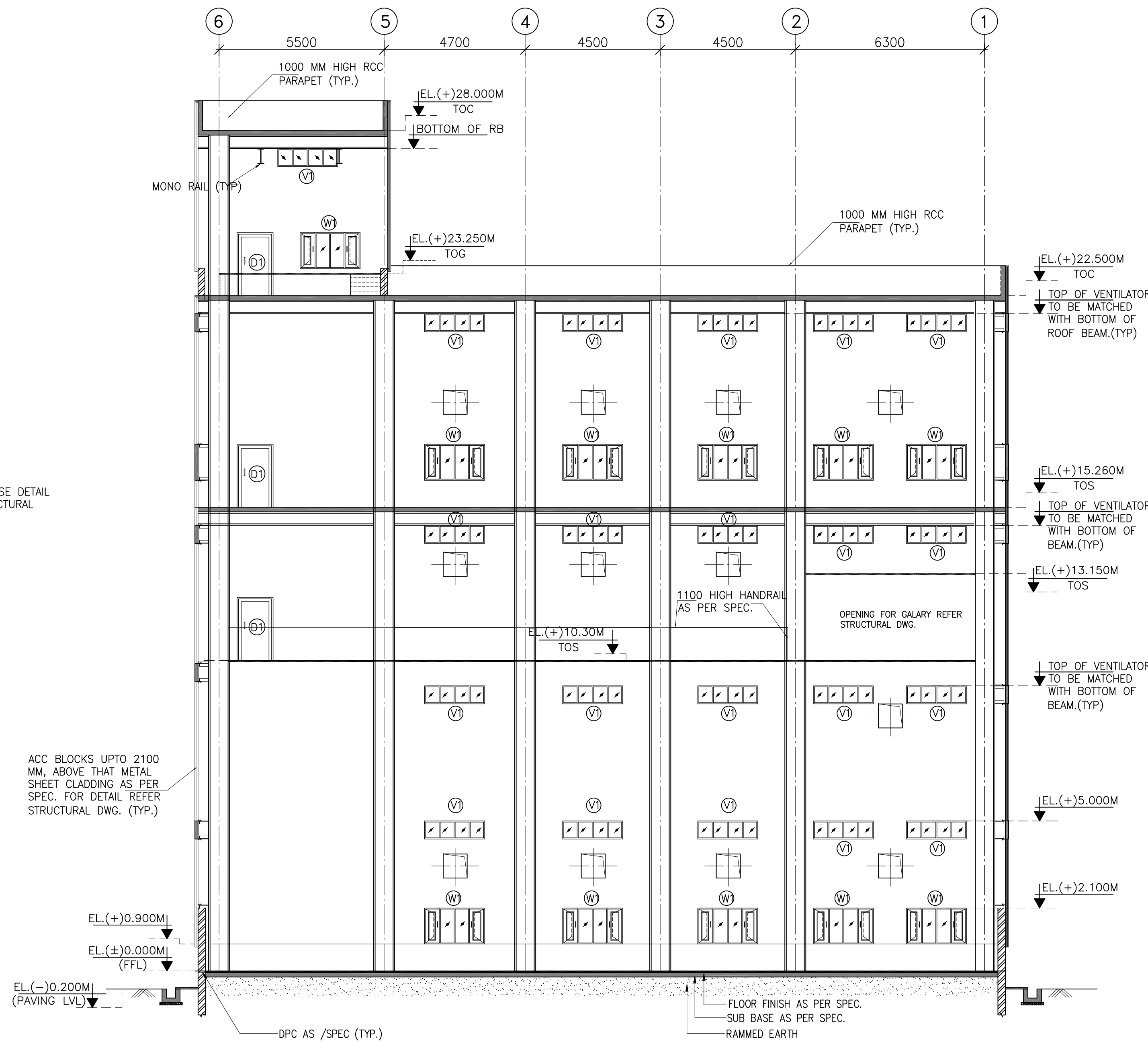
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE
3. FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL(+)5.0M
4. ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.

LEGENDS.: –

R.S.	—	ROLLING SHUTTER
C	—	CENTER LINE
EL	—	ELEVATION
FFL	—	FINISHED FLOOR LEVEL
TOC	—	TOP OF CONCRETE
TYP	—	TYPICAL
UNO	—	UNLESS NOTED OTHERWISE

REFERENCE DRAWINGS :-

1. MAITREE-00-MA-LD-120001-PEM---PLOT PLAN
2. MAITREE-00-UMA-LH-103111-PEM---GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
3. MAITREE-00-UVG-LB-101567-PEM---GYPSUM DEWATERING BUILDING FOUNDATION GA & RC DETAILS
4. MAITREE-0-HTM-MLH-200188-RPT---GYPSUM DEWATERING BUILDING
5. MAITREE-00-UVG-LH-101467-PEM---ARCH ELEVATION SH 1
6. MAITREE-00-UVG-LH-101367-PEM---ARCH PLAN



SECTION Q-Q

(*) FOR WALL OPENING DETAIL REFER DWG ---MAITREE-00-UVG-LB-100667-PEM(SH-1/2 &3)

DOOR/WINDOW OPENINGS SCHEDULE

SYMBOL	WIDTH	HEIGHT	SILL FROM FFL	UNTEL FROM FFL	REMARKS
(D1)	1200	2100	--	2100	DOUBLE SHEET STEEL DOOR, WITH INSULATION.(SINGLE SHUTTER)
(D2)	3000	6750	--	6750	STEEL DOOR AS PER SPEC. (DOUBLE SHUTTER)
(RS)	4000	5000	--	5000	ROLLING SHUTTERS SHALL BE OF DOUBLE WALLED HOLLOW SECTIONS OF GALVANIZED STEEL. HAND CRANK TO OPERATE THE DOOR BY HAND IN CASE OF EMERGENCY.
(W1)	2500	1200	900	2100	ALUMINUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS PARTLY OPENABLE PARTLY FIXED.
(V1)	2500	600	--	BOTTOM OF LB/TB/RB	ALUMINUM GLAZED FIXED VENTILATOR HERMETICALLY SEALED WITH 6mm THK. CLEAR TENSILED GLASS.

FINISHING SCHEDULE		SKIRTING (150MM HIGH)		
NAME	FLOOR FINISH		CEILING FINISH	INTERNAL WALL FINISH
GYPSUM DEWATERING BUILDING	REINFORCED CONCRETE FLOORING WITH METALLIC HARDENER TOPPING	REINFORCED CONCRETE SKIRTING	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY UP TO 900 FROM FFL CLADDING SHEET FOR BALANCED HEIGHT

BHEL - PROJECT ENGINEERING MANAGEMENT (CIVIL)	
RELEASED FOR CONSTRUCTION	
ISSUED BY	AMAN SHARMA
DATE	10-05-2021

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL) THIS DRAWING MARKED (✓) IS RELEASED FOR ☐ COMMENTS/APPROVAL ☐ PLANNING/INFORMATION ☒ CONSTRUCTION	
STAMP ALL PREVIOUS REVISION AS SUPERSEDED ISSUED BY	
NAME	SACHIN PANDIT
SIGNATURE	
DATE	07.05.2021

02	07.05.2021	USHA	SB	SP	VENTILATION & ELECTRICAL OPENING ADDED.
01	29.02.20	USHA	SB	SP	DRAWING REVISED AS PER CUSTOMER COMMENT.
	DATE	ALTERED	CHECKED	APPROVED	NOTE

PROJECT		226600MW MATREER SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)			
OWNER CONSULTANT:		OWNER:			
FICHTNER M/s FICHTNER GmbH & CO KG, Stuttgart, GERMANY		 BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH			
		 BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT INDIA		SCALE 1:100 SHEET 8 OF 8	
DESIGN BY		DATE		NAME	
13.11.2018		SB		BHUSHAN	
CHECKED BY		DATE		NAME	
13.11.2018		AN			
APPROVED BY		DATE		NAME	
13.11.2018		AN			
SUPERSEDED BY		DATE		NAME	
SYSTEM		SIZE		PROJECT NO. 421 FILE	
		ANNEX:		DRAWING NO. MATREER-00-UNG-UG-101467-PEM REV 0	
		TITLE		PLUG GAS DESULPHURISATION	
		GYPSUM DEWATERING BUILDING-ARCH ELEVATION			



BKT-2	UB 457	I
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1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND SCHEDULE OF ITEMS.

2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS OTHERWISE SPECIFIED.
3. ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS SHOWN ON DRAWING NO. 100-0000-1.
4. 0.00 M OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. 100-0000-1.
5. FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. 100-0000-1.
6. GRADE OF STEEL - E30, CONTAINING TO SA/51-2062.
7. CONNECTION DETAILS ARE INDICATE ONLY, SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF BOLTS, ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.

REFERENCE DRAWINGS & DOCS. :-

1. MURFEE-20-10V-1C-10167-PCM: RAMP AND OXIDATION BLOWER HOOD
2. MURFEE-20-10V-1C-10167-PCM: RAMP AND OXIDATION BLOWER HOOD
3. MURFEE-20-10V-1C-10167-PCM: RAMP AND OXIDATION BLOWER HOOD
4. MURFEE-20-10V-1B-10067-PCM: FUEL GAS DESULPHURATION RE FLAME & OXIDATION BLOWER-STRUCTURAL DETAILS OF ROOF
5. MURFEE-20-10V-1C-10167-PCM: FGD - OXIDATION BLOWER BUILDING & ABSORBER LAYOUT
6. MURFEE-20-10V-1C-10167-PCM: FGD - RE FLAME & OXIDATION BLOWER BUILDING-STRUCTURAL TRAINING
7. MURFEE-20-10V-1D-10012-PCM: PH-DESIGN OF CLADDING SUPPORTING NUMBERS
8. MURFEE-20-10V-1C-10012-PCM: BLUNDER BAY-DESIGN OF CLADDING RUNNERS

EL. - ELEVATION
THK. - THICK
TOD. - TODAY

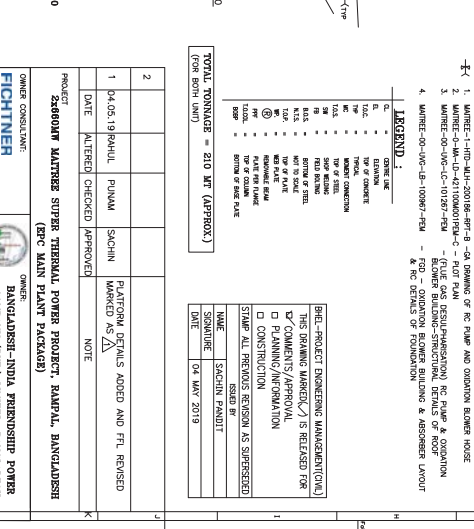
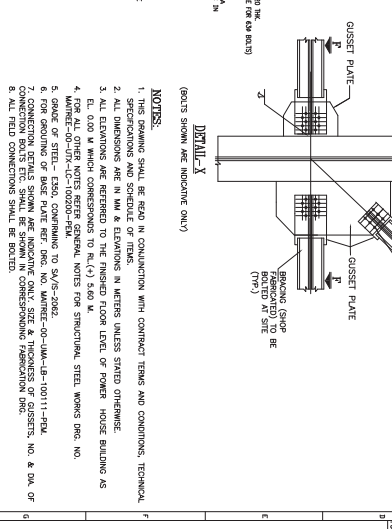
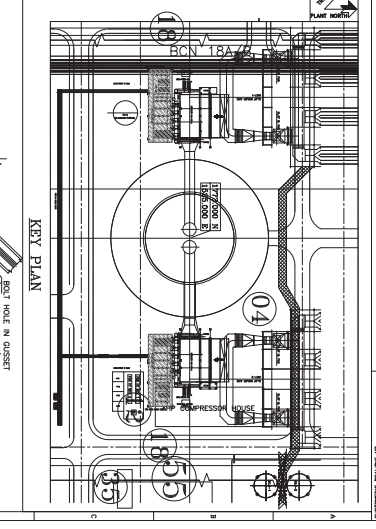
APPROVED IN 10-K CALLBOOK ON 29/05/2019

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)

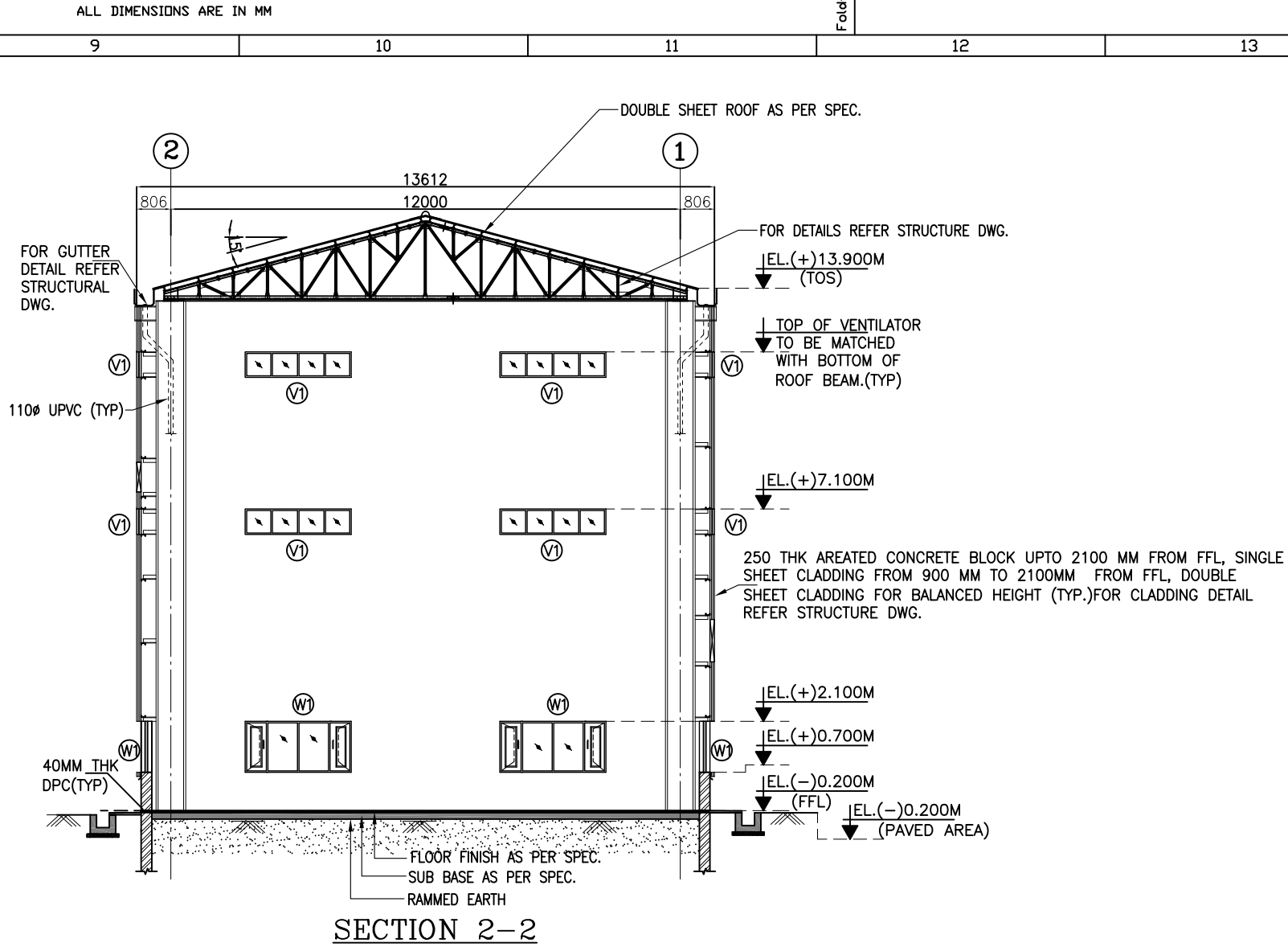
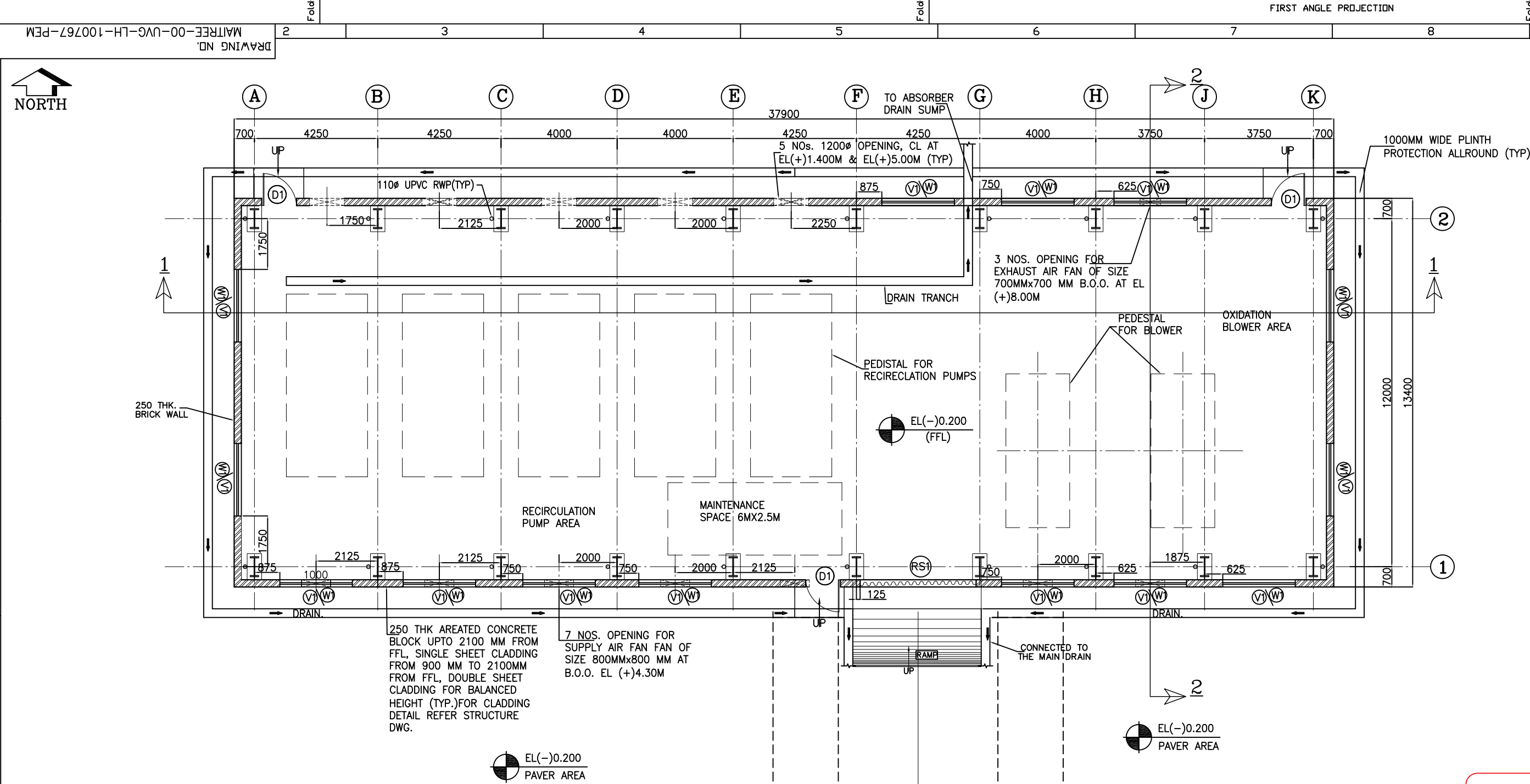
2, READ MIRROR FOR UNIT-1)

SIGNATURE	
DATE	10 MAY 2019

[illegible]

[illegible]

2					PLATFORM DETAILS ADDED AND FTL REVISED DATED 16/11/23
1	04.05.19	PRJALL	PRJMAN	SACIN	
	DATE	INTERED	CHECKED	APPROVED	NOTE
					X
PRODUCT SACINOM MATTER SUPPLY THERMAL POWER PROJECT, BANGLADESH OWNER BANGLADESH-INDIA FRIENDSHIP POWER OWNER CONSULTANT: (BPC MAIN PLANT PACKAGES) 					



LEGENDS:-

-250 THK AREATED CONC BLOCK

-OPENING

ROLLING SHUTTER

TOP - TOP OF PAVING

EL - ELEVATION

F.F.L - FINISHED FLOOR LEVEL

TOC - TOP OF CONCRETE

TYP - TYPICAL

RWP - RAIN WATER PIPE

BHEL- PROJECT ENGINEERING MANAGEMENT (CIVIL)

RELEASED FOR CONSTRUCTION

ISSUED BY

AMAN SHARMA

DATE

02-05-2021

DOOR/WINDOW OPENINGS SCHEDULE					REMARKS
SYMBOL	WIDTH	HEIGHT	SILL FROM FFL	LINTEL FROM FFL	
DT	1200	2300	--	2300	DOUBLE SHEET STEEL DOOR, WITH INSULATION, (DOUBLE SHUTTER)
RS	4000	4000	--	4000	ROLLING SHUTTERS SHALL BE OF DOUBLE WALLED HOLLOW SECTIONS OF GALVANIZED STEEL. HAND CRANK TO OPERATE THE DOOR BY HAND IN CASE OF EMERGENCY.
W	2500	1400	900	2300	ALUMINUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS PARTLY OPENABLE PARTLY FIXED.
V	2500	600	6500/10200	7100/10800	ALUMINUM GLAZED FIXED VENTILATOR HERMETICALLY SEALED WITH 5mm THK. CLEAR TOUGHENED GLASS.

NOTE: SCHEDULE OF WINDOWS OPENINGS THAT ARE NOT VISIBLE IN PLANS ARE COVERED UNDER ELEVATION DWG. AND SHOWN IN ABOVE TABLE. FOR OTHER WINDOW AND DOOR OPENINGS RESPECTIVE FLOOR PLAN DRAWINGS SHALL BE REFERRED.

FINISHING SCHEDULE		SKIRTING (150MM HIGH)	Ceiling Finish	INTERNAL WALL FINISH
NAME	FLOOR FINISH			
MAINTENANCE AREA/RC PUMP AREA/OXIDATION BLOWER AREA	REINFORCED CONCRETE FLOORING WITH METALLIC HARDENER TOPPING	REINFORCED CONCRETE SKIRTING	METAL SHEET	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY UP TO 2100 FROM FFL. CLADDING SHEET FOR BALANCED HEIGHT

SCHEDULE OF EXTERNAL FINISHES	
EXTERIOR PLASTERING	18 MM THK. WITH 1:6 CEMENT SAND MORTAR
INTERIOR PLASTERING	12MM WITH 1:6 CEMENT SAND MORTAR
EXTERIOR FINISHING	ACRYLIC BASED WEATHER COAT PAINT

- NOTES:-
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.

2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.

3. FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL. 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL (+)5.0M

4. ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.

- REFERENCE DRAWINGS :-
1. MAITREE-00-MA-LD-12001-PEM --PLOT PLAN

2. MAITREE-00-UMA-LH-10311-PEM GEN. NOTES & STD. DETAILS FOR ARCH. WORKS

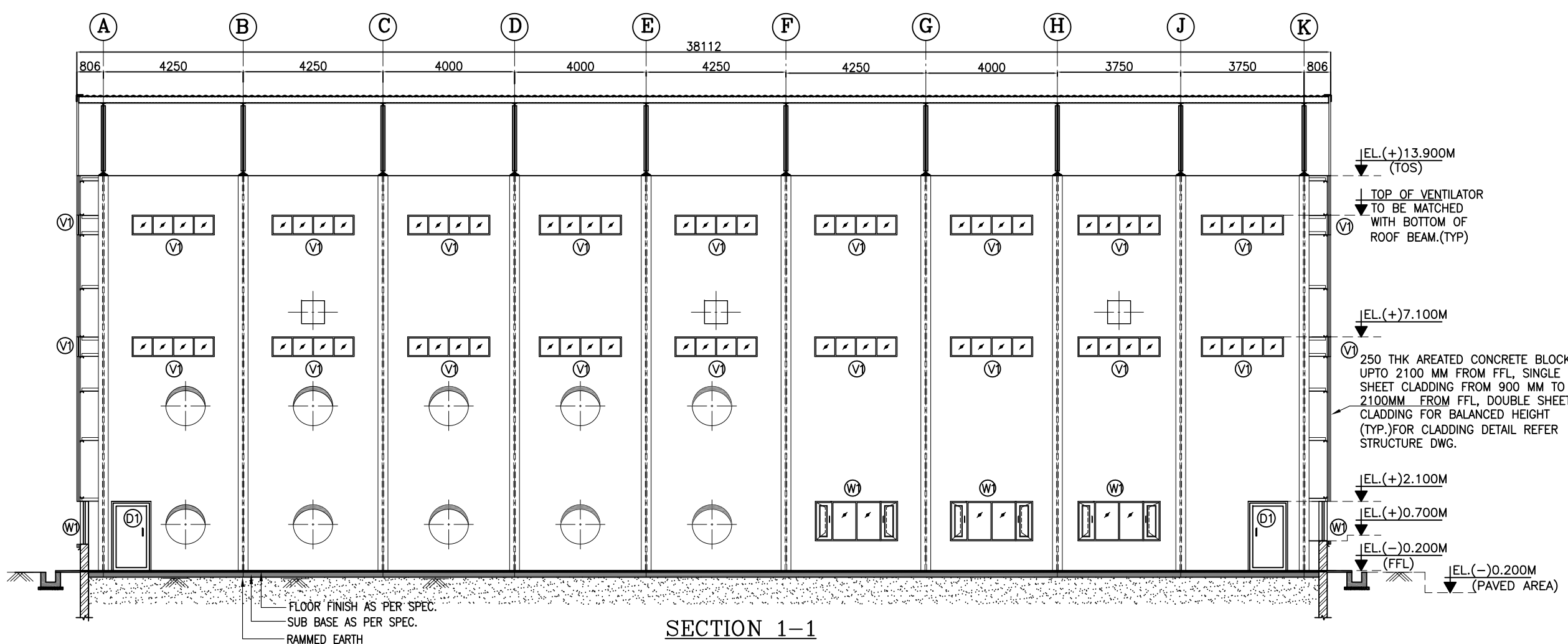
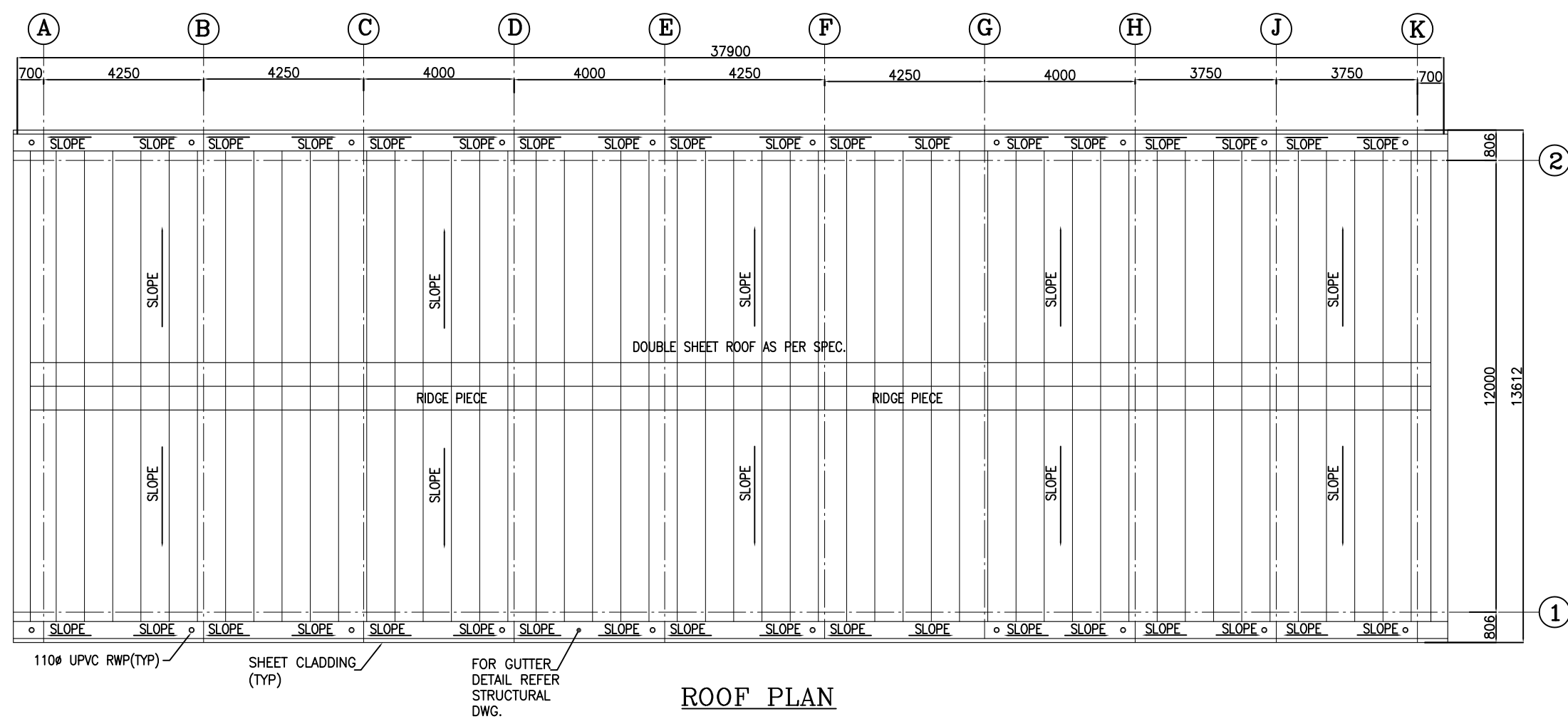
3. MAITREE-1-HTD-MUH-200186-RPT-B GA DRAWING OF RC PUMP AND OXIDATION BLOWER HOUSE.

4. MAITREE-00-UVG-LB-100967-PEM FGD - OXIDATION BLOWER BUILDING & ABSORBER LAYOUT & RC DETAILS OF FOUNDATION

5. MAITREE-00-UVG-LH-100867-PEM FGD - FLUE GAS DESULPHARISATION RC PUMP & OXIDATION BLOWER BUILDING--ARCH ELEVATIONS

6. ALL MS LADDERS SHALL BE HOT DIP GALVANIZED & PAINTED AS PER SPEC.

PLAN AT (-)0.20M FFL 03
FOR CO-ORDINATE REFER FOUNDATION DWG. MAITREE-00-UVG-LB-100967-PEM



BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)

THIS DRAWING MARKED(✓) IS RELEASED FOR

☐ COMMENTS/ APPROVAL

☐ PLANNING/ INFORMATION

☒ CONSTRUCTION

STAMP ALL PREVIOUS REVISION AS SUPERSEDED

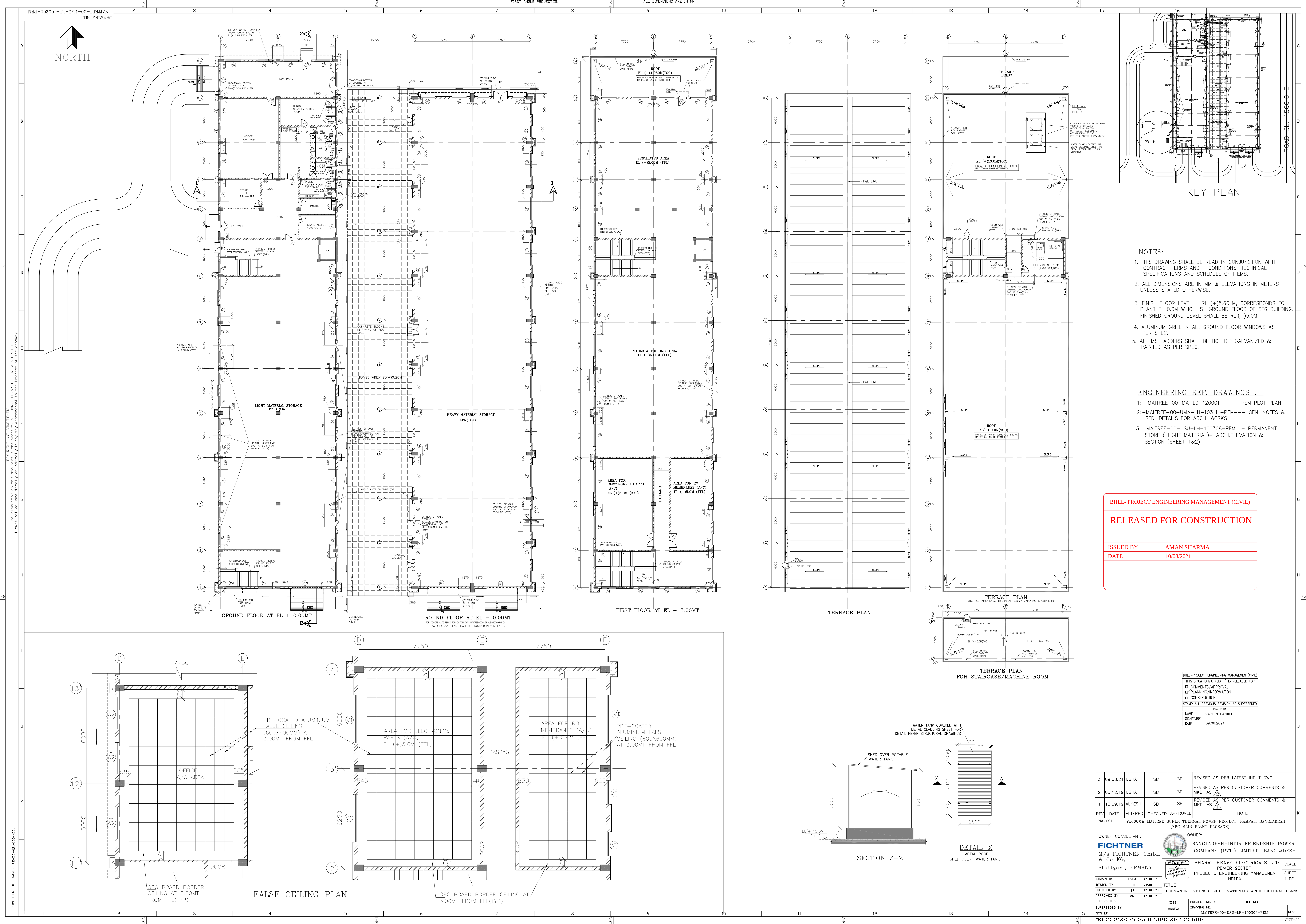
ISSUED BY

NAME SACHIN PANDIT

SIGNATURE

DATE 01.05.21

03	01.05.21	USHA	SB	SP	VENTILATION & ELECTRICAL OPENING ADDED.
02	25.11.19	USHA	SB	SP	DRAWING REVISED AS PER CUSTOMER COMMENT.
01	02.09.19	USHA	SB	SP	DRAWING REVISED AS PER CUSTOMER COMMENT.
REV	DATE	ALTERED	CHECKED	APPROVED	NOTE
PROJECT 2x680MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICHTNER M/s FICHTNER GmbH Stuttgart, GERMANY		 OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA			
DRAWN BY: DATE: DESIGN BY: CHECKED BY: APPROVED BY:	25.09.2018 25.09.2018 25.09.2018 25.09.2018 25.09.2018	NAME: BHASHKAR SP AN SP	TITLE FLUE GAS DESULPHARISATION RC PUMP & OXIDATION BLOWER BUILDING--ARCH PLAN		
SUPERSEDES: SUPERSEDED BY: SYSTEM:			SIZE: ANNEX:	PROJECT NO: 421 DRAWING NO: MAITREE-00-UVG-LH-100767-PEM	FILE: REV 03
			SCALE: 1:100 SHEET 1 OF 1		



NOTES:-

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
3. FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL.(+)5.0M
4. ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.
5. ALL MS LADDERS SHALL BE HOT DIP GALVANIZED & PAINTED AS PER SPEC.

ENGINEERING REF. DRAWINGS :-

- 1:- MAITREE-00-MA-LD-120001 - PPM PLOT PLAN
- 2:-MAITREE-00-UMA-LH-10311-PEM--- GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
3. MAITREE-00-USU-LH-100308-PEM - PERMANENT STORE (LIGHT MATERIAL)- ARCH.ELEVATION & SECTION (SHEET-1&2)

BHEL- PROJECT ENGINEERING MANAGEMENT (CIVIL)

RELEASED FOR CONSTRUCTION

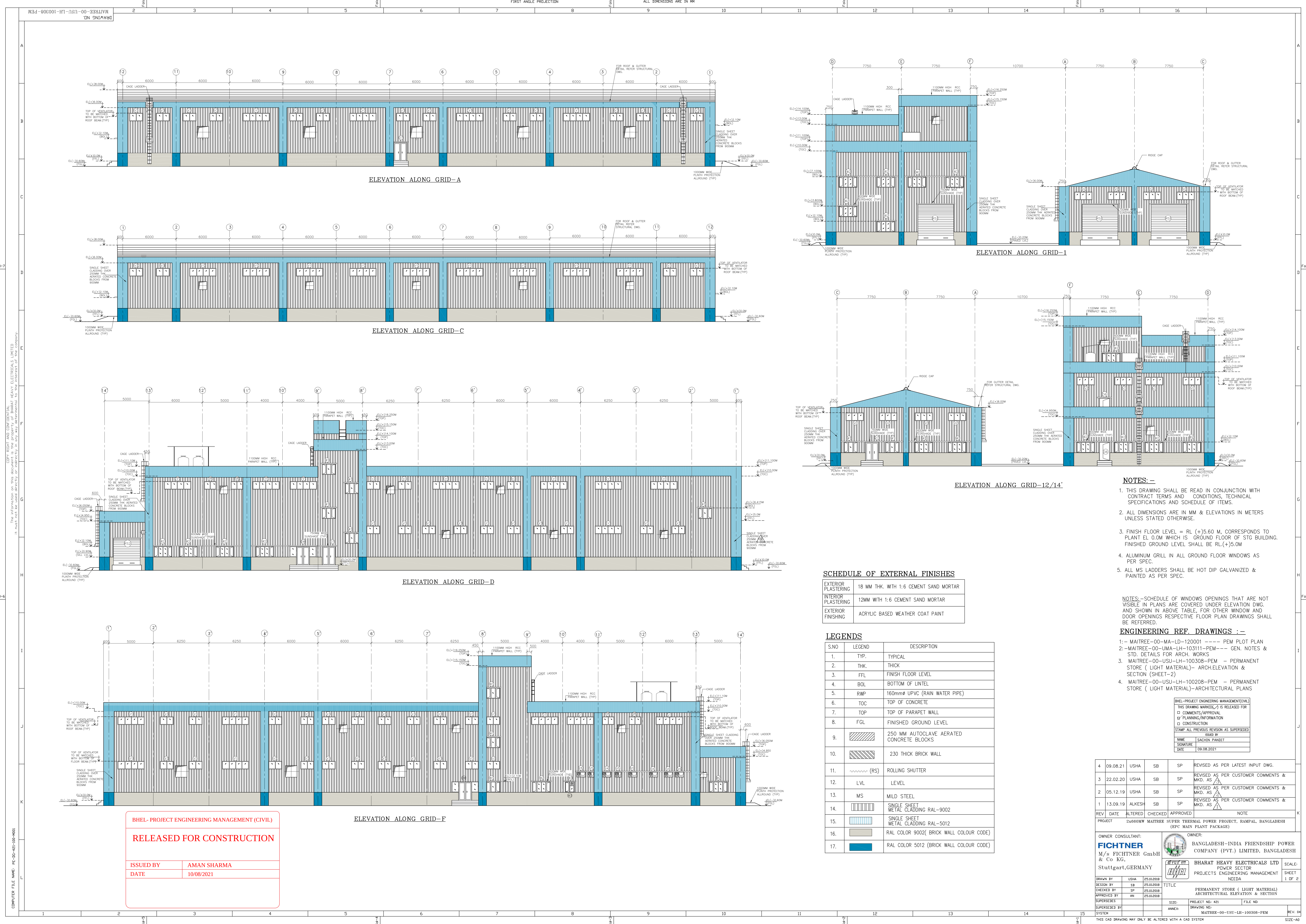
ISSUED BY AMAN SHARMA
DATE 10/08/2021

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)
THIS DRAWING MARKED (✓) IS RELEASED FOR
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□ PLANNING/INFORMATION
□ CONSTRUCTION
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ISSUED BY
NAME SACHIN PANDIT
SIGNATURE
DATE 09.08.2021

3	09.08.21	USHA	SB	SP	REVISED AS PER LATEST INPUT DWG.
2	05.12.19	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS & MKD. AS
1	13.09.19	ALKESH	SB	SP	REVISED AS PER CUSTOMER COMMENTS & MKD. AS
REV	DATE	ALTERED	CHECKED	APPROVED	NOTE
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					

OWNER CONSULTANT:		OWNER:	
BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH		BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH	
M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY		BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NDIDA	
DESIGN BY	USHA	25.10.2018	TITLE
CHECKED BY	SB	25.10.2018	PERMANENT STORE (LIGHT MATERIAL)-ARCHITECTURAL PLANS
APPROVED BY	AN	25.10.2018	SIZE
SUPERSEDES			PROJECT NO: 421
SUPERSEDED BY			FILE NO:
SYSTEM			ANNEX: DRAWING NO: MAITREE-00-USU-LR-100208-PEM

THIS CAD DRAWING MAY ONLY BE ALTERED WITH A CAD SYSTEM				REV-03
SHEET 1 OF 1				SIZE-A0



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COMPUTER FILE NAME: PE-00-48-100-0001

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
RELEASED FOR CONSTRUCTION
ISSUED BY: AMAN SHARMA
DATE: 10/08/2021

SCHEDULE OF EXTERNAL FINISHES	
EXTERIOR PLASTERING	18 MM THK. WITH 1:6 CEMENT SAND MORTAR
INTERIOR PLASTERING	12MM WITH 1:6 CEMENT SAND MORTAR
EXTERIOR FINISHING	ACRYLIC BASED WEATHER COAT PAINT

S.NO	LEGEND	DESCRIPTION
1.	TYP.	TYPICAL
2.	THK.	THICK
3.	FFL	FINISH FLOOR LEVEL
4.	BOL	BOTTOM OF LINTEL
5.	RWP	160mmø UPVC (RAIN WATER PIPE)
6.	TOC	TOP OF CONCRETE
7.	TOP	TOP OF PARAPET WALL
8.	FGL	FINISHED GROUND LEVEL
9.		250 MM AUTOCLAVE AERATED CONCRETE BLOCKS
10.		230 THICK BRICK WALL
11.		(RS) ROLLING SHUTTER
12.	LVL	LEVEL
13.	MS	MILD STEEL
14.		SINGLE SHEET METAL CLADDING RAL-9002
15.		SINGLE SHEET METAL CLADDING RAL-5012
16.		RAL COLOR 9002(BRICK WALL COLOUR CODE)
17.		RAL COLOR 5012 (BRICK WALL COLOUR CODE)

- NOTES:-**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
 - FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL.(+)5.0M
 - ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.
 - ALL MS LADDERS SHALL BE HOT DIP GALVANIZED & PAINTED AS PER SPEC.

NOTES:- SCHEDULE OF WINDOWS OPENINGS THAT ARE NOT VISIBLE IN PLANS ARE COVERED UNDER ELEVATION DWG. AND SHOWN IN ABOVE TABLE. FOR OTHER WINDOW AND DOOR OPENINGS RESPECTIVE FLOOR PLAN DRAWINGS SHALL BE REFERRED.

- ENGINEERING REF. DRAWINGS :-**
- MAITREE-00-MA-LD-120001 ---- PEM PLOT PLAN
 - MAITREE-00-UWA-LH-103111-PEM --- GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
 - MAITREE-00-USU-LH-100308-PEM -- PERMANENT STORE (LIGHT MATERIAL)- ARCH.ELEVATION & SECTION (SHEET-2)
 - MAITREE-00-USU-LH-100208-PEM -- PERMANENT STORE (LIGHT MATERIAL)-ARCHITECTURAL PLANS

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)	
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□ PLANNING/INFORMATION	
□ CONSTRUCTION	
STAMP ALL PREVIOUS REVISION AS SUPERSEDED	
NAME	SACHIN PANKAJ
SIGNATURE	
DATE	09.08.2021

4	09.08.21	USHA	SB	SP	REVISED AS PER LATEST INPUT DWG.
3	22.02.20	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS & MKD. AS
2	05.12.19	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS & MKD. AS
1	13.09.19	ALKESH	SB	SP	REVISED AS PER CUSTOMER COMMENTS & MKD. AS
REV	DATE	ALTERED	CHECKED	APPROVED	NOTE
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					

OWNER CONSULTANT:		OWNER:	
M/s FICHTNER GmbH & Co KG, Stuttgart, GERMANY		BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH	
DESIGN BY: USHA		Bharat Heavy Electricals Ltd	
CHECKED BY: SP		POWER SECTOR PROJECTS ENGINEERING MANAGEMENT	
APPROVED BY: AN		NIIIDA	
SUPERSEDED BY:		TITLE	
SUPERSEDED BY:		PERMANENT STORE (LIGHT MATERIAL) ARCHITECTURAL ELEVATION & SECTION	
SYSTEM		ANNEX: DRAWING NO: MAITREE-00-USU-LH-100308-PEM	
SIZE		FILE NO:	
PROJECT NO: 421		SHEET 1 OF 2	
REV. 04		THIS CAD DRAWING MAY ONLY BE ALTERED WITH A CAD SYSTEM	



NOTES: –

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
3. FINISH FLOOR LEVEL = $RL (+)5.60 M$, CORRESPONDS TO PLANT EOL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE $RL.(-)5.0M$
4. ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.
5. ALL MS LADDERS SHALL BE HOT DIP GALVANIZED & PAINTED AS PER SPEC.

FINISHING SCHEDULE		SKIRTING (150MM HIGH)	DADO	INTERNAL WALL FINISH	CEILING FINISH
NAME	FLOOR FINISH				
HEAVY MATERIAL STORAGE/LIGHT MATERIAL STORAGE	CARBORUNDUM (25 MM THICK HEAVY DUTY) CEMENT CONCRETE TILES WITH OIL RESISTANT EPOXY COATING (150 MICRON THICK)	ROCC SKIRTING	—	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.
TOILET/PANTRY	GLAZED NON SLIP FULLY VITRIFIED CERAMIC TILES 10MM THK.	—	GLAZED CERAMIC WALL TILES IN DADO UP TO 2.3M HT.	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY FOR BALANCE HEIGHT.	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.
STORE KEEPER/LOOKER & CHANGE ROOM/LOBBY/ENTRANCE	VITRIFIED TILES 600X600MM 10 MM THK.	VITRIFIED TILES	—	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY.	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.
AREA FOR ELECTRONICS PARTS (AC)	6.5 MM THICK HEAVYDUTY PVC TILES	6.5 MM THICK HEAVYDUTY PVC TILES	—	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY.	COMBINATION OF PRE COATED ALUMINUM & GRG BOARD FALSE CEILING
STAIRCASE/LIFT/ CORRIDOR	VITRIFIED CERAMIC TILES	VITRIFIED TILES	—	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY.	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.
MACHINE ROOM	REINFORCED CONCRETE WITH HARD SCAFF TOPPING CARBORUNDUM TYPE	ROCC SKIRTING	—	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.
OFFICE/AREA FOR RO MEMBERS(AC)	VITRIFIED TILES 600X600MM 10 MM THK.	VITRIFIED TILES	—	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY.	COMBINATION OF PRE COATED ALUMINUM & GRG BOARD FALSE CEILING

ENGINEERING REF. DRAWINGS :-

- 1:- MAITREE-00-MA-LD-120001 ----- PEM PLOT PLAN
2:-MAITREE-00-UMA-LH-103111-PEM--- GEN. NOTES
STD. DETAILS FOR ARCH. WORKS
3. MAITREE-00-USU-LH-100308-PEM - PERMANENT
STORE (LIGHT MATERIAL)- ARCH.ELEVATION &
SECTION (SHEET-1)
4. MAITREE-00-USU-LH-100208-PEM - PERMANENT
STORE (LIGHT MATERIAL)-ARCHITECTURAL PLANS

NOTE: SCHEDULE OF WINDOWS OPENINGS THAT ARE NOT VISIBLE IN PLANS ARE COVERED UNDER ELEVATION DWG. AND SHOWN IN ABOVE TABLE, FOR OTHER WINDOW AND DOOR OPENINGS RESPECTIVE FLOOR PLAN DRAWINGS SHALL BE REFERRED.

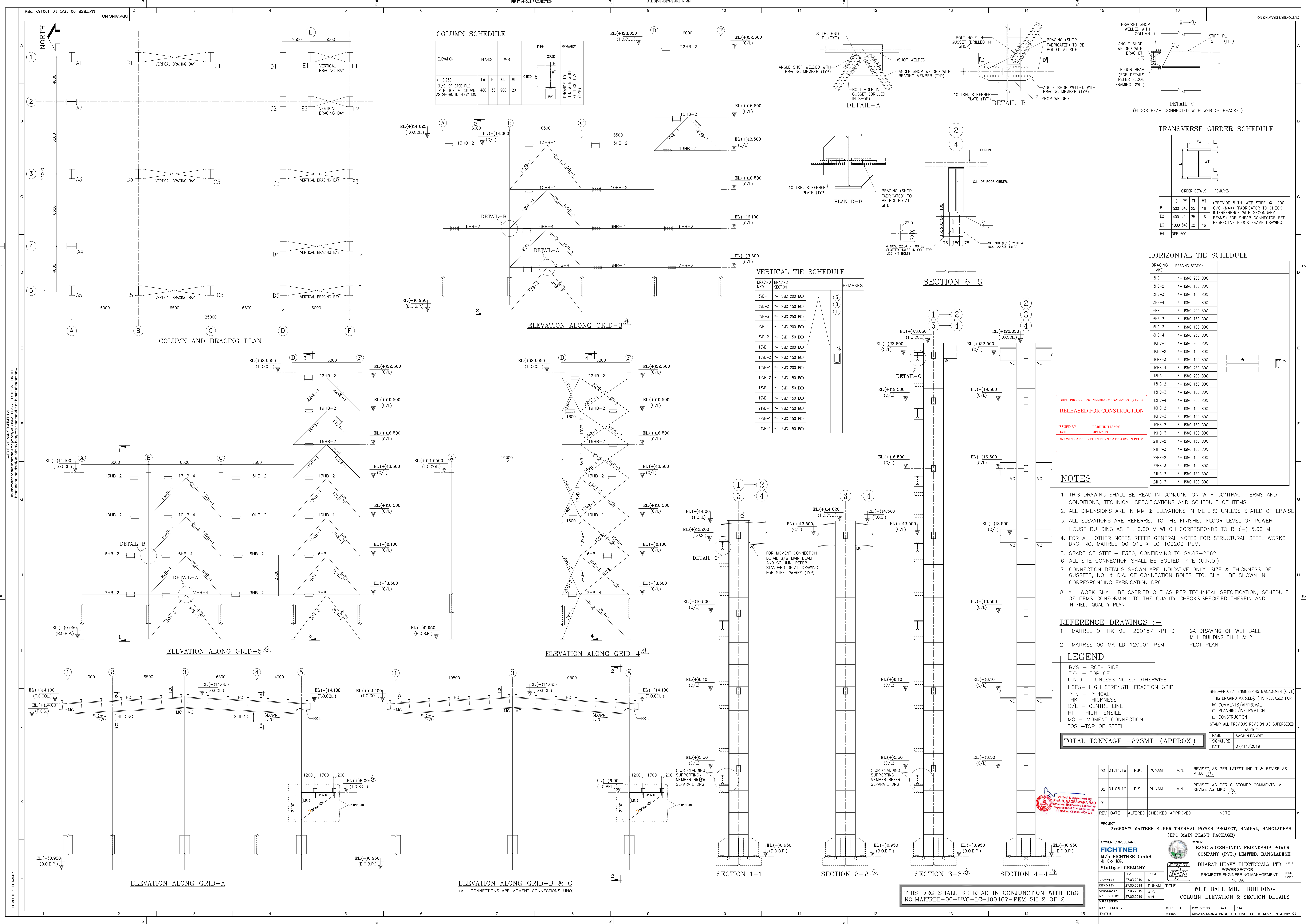
BH&L - PROJECT ENGINEERING MANAGEMENT (CIVIL)	
RELEASED FOR CONSTRUCTION	
ISSUED BY	AMAN SHARMA
DATE	10/08/2021

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)	
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ISSUED BY	
NAME	SACHIN PANDIT
SIGNATURE	
DATE	09.08.2021

4	09.08.21	USHA	SB	SP	REVISED AS PER LATEST INPUT DWG.	
3	22.02.20	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS & MKD. AS	
2	05.12.19	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS & MKD. AS	
1	13.09.19	ALKESH	SB	SP	REVISED AS PER CUSTOMER COMMENTS & MKD. AS	
REV	DATE	ALTERED	CHECKED	APPROVED	NOTE	
PROJECT : 2x600MW MATREFFE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)						
OWNER CONSULTANT:				OWNER:		
FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart, GERMANY				 BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH		
DRAWN BY : USHA 25.10.2018 DESIGN BY : SB 25.10.2018 CHECKED BY : SP 25.10.2018 APPROVED BY : AN 25.10.2018				 BHARAT HEAVY ELECTRICALS LTD OWNER SECTOR PROJECTS ENGINEERING MANAGEMENT NIDDA		
SUPERDESIGNED BY : SUPERAPPROVED BY :				PERMANENT STORE (LIGHT MATERIAL) ARCHITECTURAL ELEVATION & SECTION		
SIZE:				PROJECT NO: 421		FILE NO
ANNEX:				DRAWING NO:		REV. NO
THIS CAD DRAWING MAY ONLY BE ALTERED WITH A CAD SYSTEM				MATREFFE-00-USH-LR-100308-PPM		SIZE-A0

THIS CAD DRAWING MAY ONLY BE ALTERED WITH A CAD SYSTEM

SIZE-A0



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COMPUTER FILE NAME:

THIS DRG SHALL BE READ IN CONJUNCTION WITH DRG
NO. MAITREE-00-UVG-LC-100467-PEM SH 2 OF 2

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
RELEASED FOR CONSTRUCTION
ISSUED BY: FABRICATION JAMAL
DATE: 20/11/2019
DRAWING APPROVED IN FID-N CATEGORY IN PDM

NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL.(+) 5.60 M.
- FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MAITREE-00-01UTX-LC-100200-PEM.
- GRADE OF STEEL - E350, CONFORMING TO SA/IS-2062.
- ALL SITE CONNECTION SHALL BE BOLTED TYPE (U.N.O.).
- CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- ALL WORK SHALL BE CARRIED OUT AS PER TECHNICAL SPECIFICATION, SCHEDULE OF ITEMS CONFORMING TO THE QUALITY CHECKS, SPECIFIED THEREIN AND IN FIELD QUALITY PLAN.

REFERENCE DRAWINGS :-

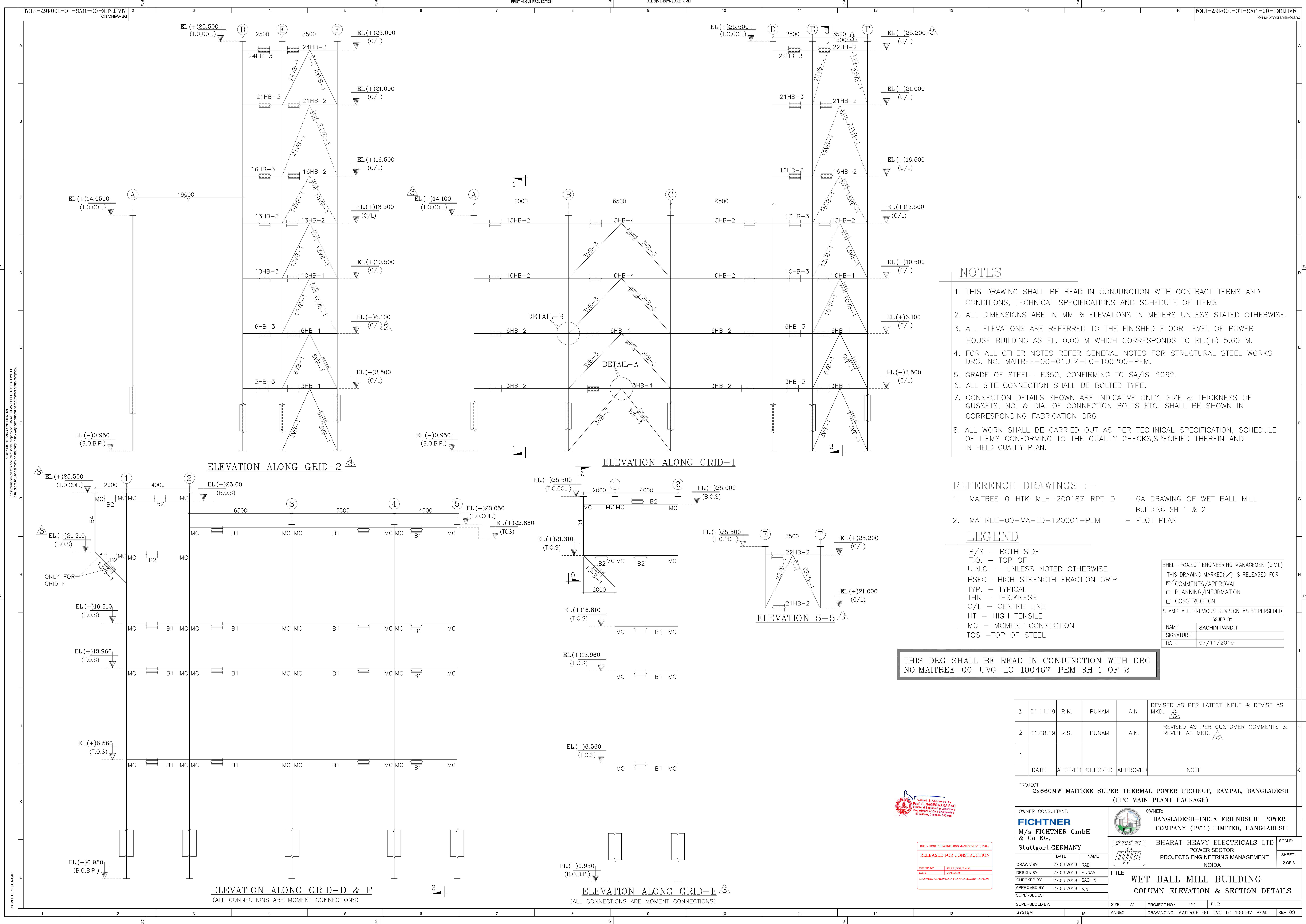
- MAITREE-00-HTK-MLH-200187-RPT-D -GA DRAWING OF WET BALL MILL BUILDING SH 1 & 2
- MAITREE-00-MA-LD-120001-PEM - PLOT PLAN

LEGEND

B/S - BOTH SIDE
T.O. - TOP OF
U.N.O. - UNLESS NOTED OTHERWISE
HSFG - HIGH STRENGTH FRACTION GRIP
TYP. - TYPICAL
THK - THICKNESS
C/L - CENTRE LINE
HT - HIGH TENSILE
MC - MOMENT CONNECTION
TOS - TOP OF STEEL

TOTAL TONNAGE - 273MT. (APPROX.)

03 01.11.19 R.K. PUNAM A.N. REVISED AS PER LATEST INPUT & REVISE AS MKD. 3			
02 01.08.19 R.S. PUNAM A.N. REVISED AS PER CUSTOMER COMMENTS & REVISE AS MKD. 2			
01			
REV	DATE	ALTERED	CHECKED
APPROVED			
NOTE			
PROJECT			
2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)			
OWNER CONSULTANT:		OWNER:	
FICHTNER		BANGLADESH-INDIA FRIENDSHIP POWER	
M/s FICHTNER GmbH & Co. KG		COMPANY (PVT.) LIMITED, BANGLADESH	
Stuttgart, GERMANY		BHARAT HEAVY ELECTRICALS LTD	
DESIGN BY		POWER SECTOR PROJECTS ENGINEERING MANAGEMENT	
CHECKED BY		NOIDA	
APPROVED BY		TITLE	
SUPERSEDES		WET BALL MILL BUILDING COLUMN-ELEVATION & SECTION DETAILS	
SUPERSEDED BY		SIZE: A0 PROJECT NO.: 421 FILE:	
SYSTEM		ANNEX	
		DRAWING NO: MAITREE-00-UVG-LC-100467-PEM	
		SHEET 1 OF 3	



NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
3. ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL.(+) 5.60 M.
4. FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MAITREE-00-01UTX-LC-100200-PEM.
5. GRADE OF STEEL- E350, CONFIRMING TO SA/IS-2062.
6. ALL SITE CONNECTION SHALL BE BOLTED TYPE.
7. CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
8. ALL WORK SHALL BE CARRIED OUT AS PER TECHNICAL SPECIFICATION, SCHEDULE OF ITEMS CONFORMING TO THE QUALITY CHECKS, SPECIFIED THEREIN AND IN FIELD QUALITY PLAN.

REFERENCE DRAWINGS :-

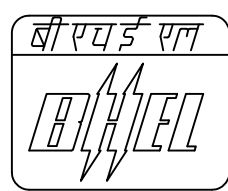
1. MAITREE-0-HTK-MLH-200187-RPT-D -GA DRAWING OF WET BALL MILL BUILDING SH 1 & 2
2. MAITREE-00-MA-LD-120001-PEM - PLOT PLAN

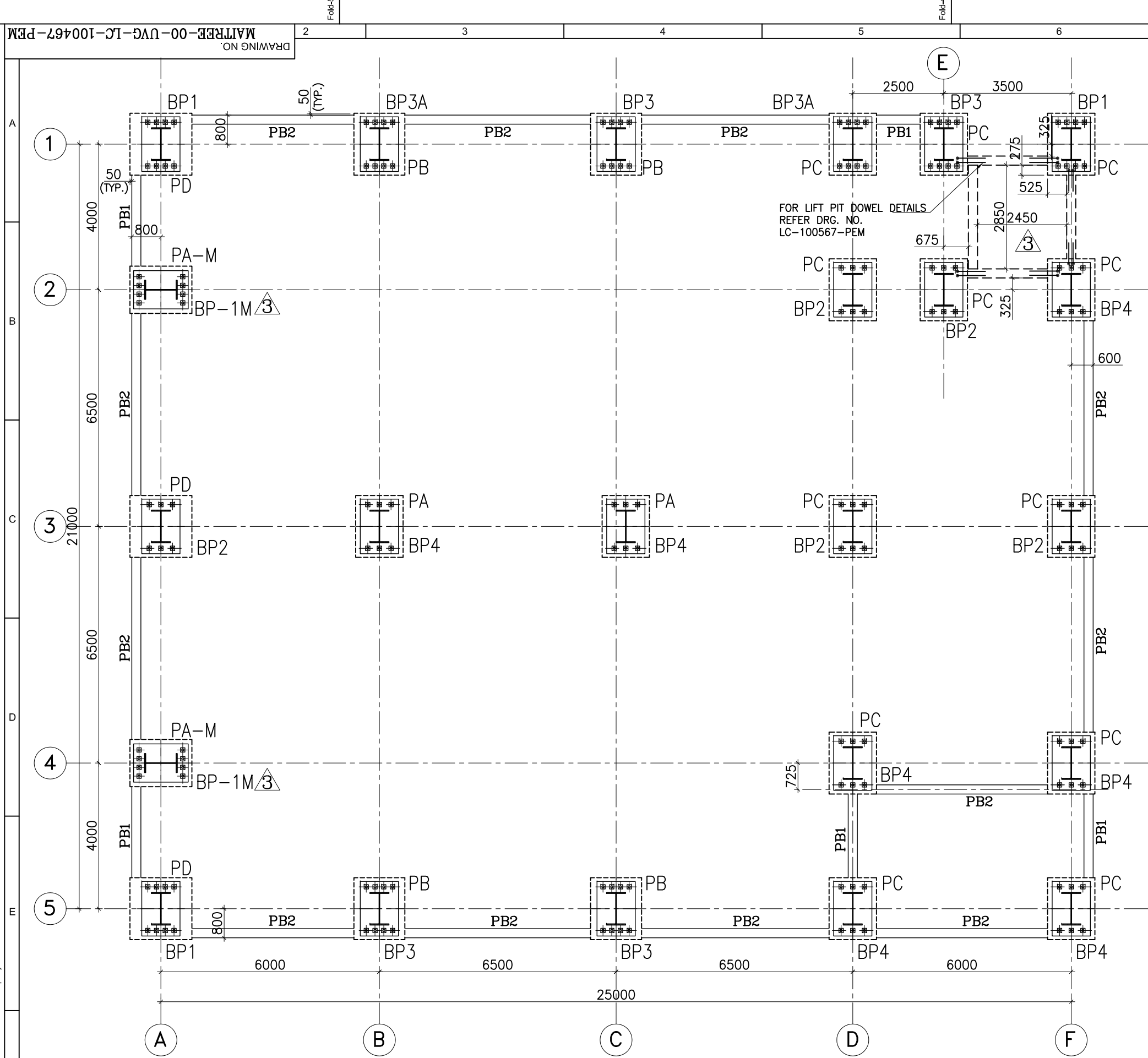
LEGEND

B/S - BOTH SIDE
T.O. - TOP OF
U.N.O. - UNLESS NOTED OTHERWISE
HSFG- HIGH STRENGTH FRACTION GRIP
TYP. - TYPICAL
THK - THICKNESS
C/L - CENTRE LINE
HT - HIGH TENSILE
MC - MOMENT CONNECTION
TOS -TOP OF STEEL

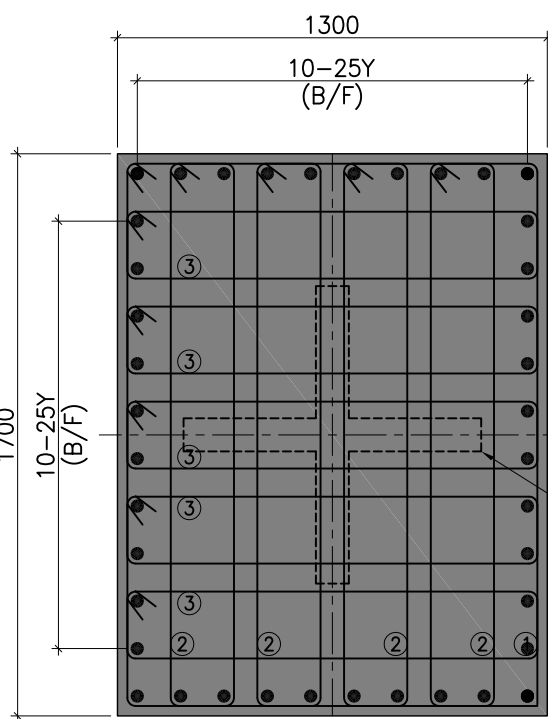
BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)	
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☐	PLANNING/INFORMATION
☐	CONSTRUCTION
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ISSUED BY	
NAME	SACHIN PANDIT
SIGNATURE	
DATE	07/11/2019

THIS DRG SHALL BE READ IN CONJUNCTION WITH DRG NO. MAITREE-00-UVG-LC-100467-PEM SH 1 OF 2

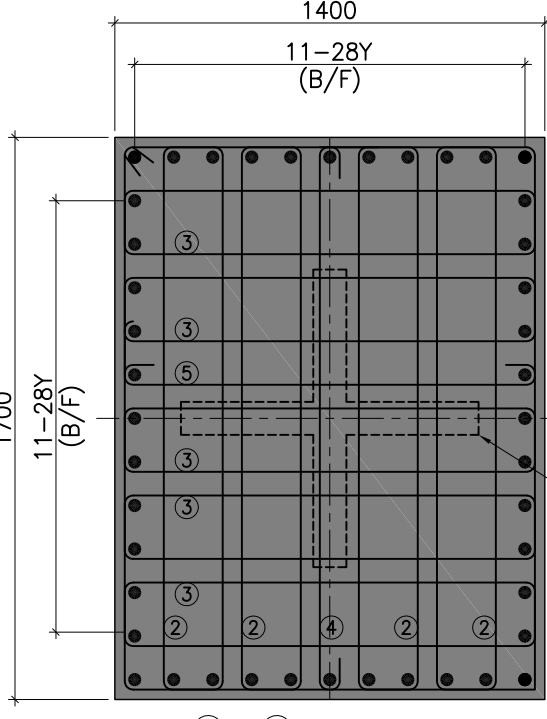
3	01.11.19	R.K.	PUNAM	A.N.	REVISED AS PER LATEST INPUT & REVISE AS MKD. 3	J
2	01.08.19	R.S.	PUNAM	A.N.	REVISED AS PER CUSTOMER COMMENTS & REVISE AS MKD. 2	
1						
	DATE	ALTERED	CHECKED	APPROVED	NOTE	K
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)						
OWNER CONSULTANT: FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY			 OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH			
			 BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA		SCALE: SHEET : 2 OF 3	
DRAWN BY	DATE	NAME	TITLE WET BALL MILL BUILDING COLUMN-ELEVATION & SECTION DETAILS			
DESIGN BY	27.03.2019	PUNAM				
CHECKED BY	27.03.2019	SACHIN				
APPROVED BY	27.03.2019	A.N.				
SUPERSEDED BY:			SIZE: A1 PROJECT NO.: 421 FILE:			
SYSTEM:		15	ANNEX:		DRAWING NO.: MAITREE-00-UVG-LC-100467-PEM	REV 03



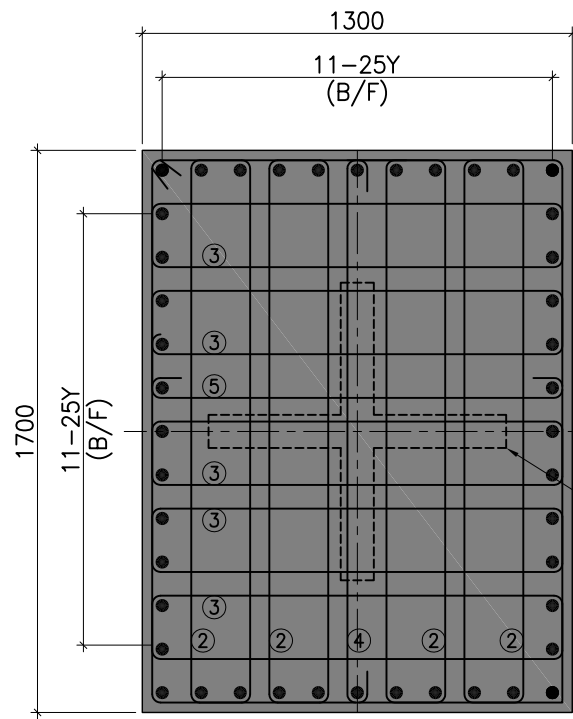
BASE PLATE AND PEDESTAL PLAN



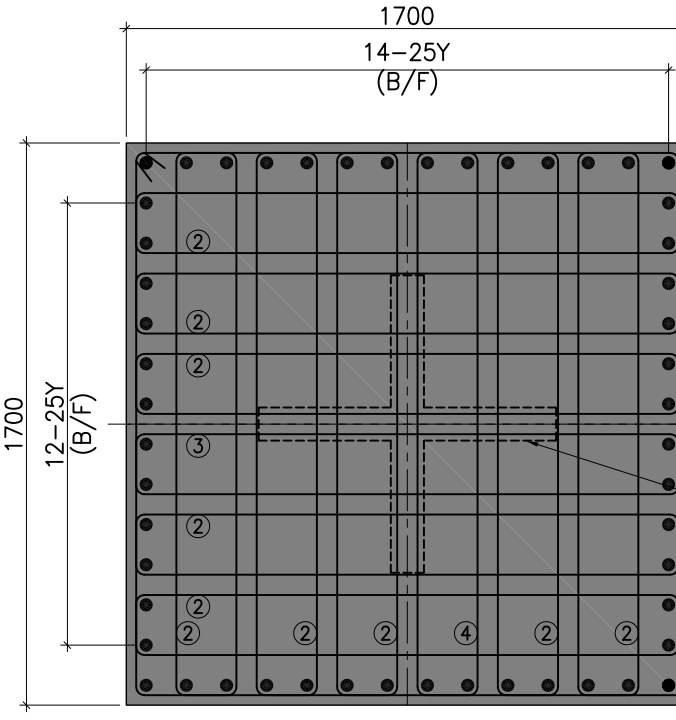
RC DET. OF PED. MKD. PA



RC DET. OF PED. MKD. PB



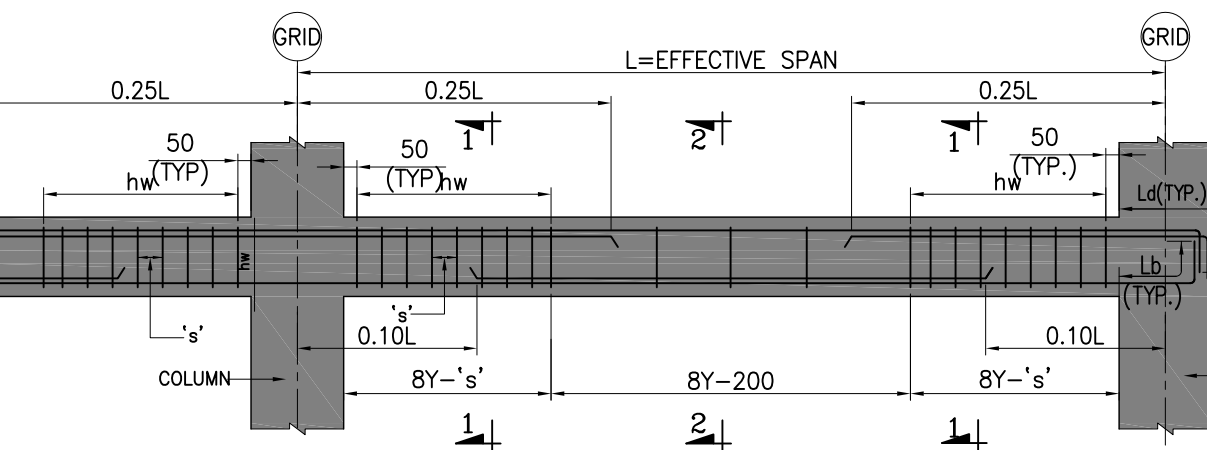
RC DET. OF PED. MKD. PC



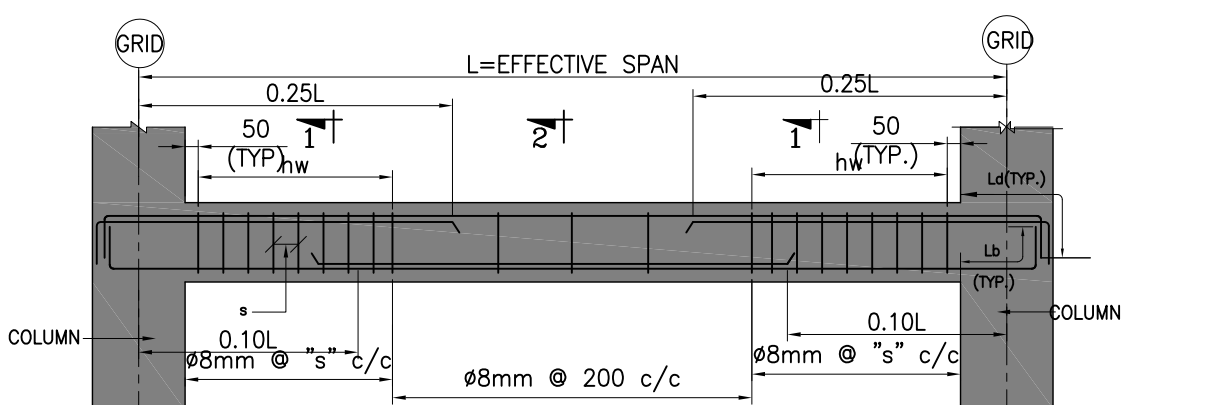
RC DET. OF PED. MKD. PD

TABLE-A

Beam Group Marked	Dimension	Depth (D)	Width (W)	SPAN REINFORCEMENT			SUPPORTS REINFORCEMENT		
				Top	Bottom	Shear	Top	Bottom	Shear
PB1	mm	500	250	2-25Y	2-25Y	2L-8Y-200	2-25Y	2-25Y	2L-8Y-200
PB2	mm	650	250	2-25Y	4-25Y	2L-8Y-200	4-25Y	2-25Y	2L-8Y-200



TYPICAL DETAIL OF BEAM (CONTINUOUS SPAN)



TYPICAL DETAIL OF BEAM (SINGLE SPAN)

DET. OF BASE PLATE MKD. BP-2, BP-4

PLATES MKD. FCS SHALL BE WELDED AFTER TIGHTENING OF BOLTS (TYP FOR ALL BASE PL.)

DET. OF BASE PLATE MKD. BP-1, BP-3

PLATES MKD. FCS SHALL BE WELDED AFTER TIGHTENING OF BOLTS (TYP FOR ALL BASE PL.)

TYPICAL PEDESTAL DETAILS

BASE PL. SCHEDULE

BASE PL. SCHEDULE

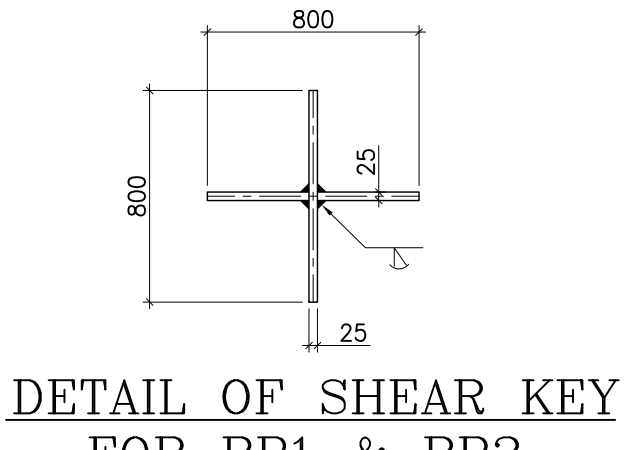
GROUP MKD.	BP-1/ BP-1M	BP-2	BP-3/ BP-3A	BP-4	REMARKS
COL. MKD.	A1, A2, A4, A5, F1	A3, D2, D3, E2, F3	B1, B5, C1, C5, D1, E1	B3, C3, D4, D5, F2, F4, F5	
NO. OF BOLT	45	45	45	45	BASE PL. WITH 4 NOS. GROUT PIPES AND 4 BOLT HOLE
DIA OF BOLT	63	63	63	63	TOTAL NUMBER AND DIA OF BOLT
FT	SAME AS COL. FL. PL. THICKNESS				PL. BUTT WELDED TO COL. FL. PL.
WT	REFER COLUMN SECTION (REFER SH. 2 OF 2)				COL. WEB PL.
FS	12	12	12	12	FL. STIFF. PL.
WS	12	12	12	12	WEB STIFF. PL.
WP	50	50	50	50	WASHER PL. WITH 1-11 BOLT HOLE
FCS	12	12	12	12	FL. CROSS STIFF. PL.
WCS	12	12	12	12	WEB CROSS STIFF. PL.
SKT	25	25	32/36	32	SHEAR KEY
-	-	-	-	-	

4 HOLES = DIA. OF BOLT + 15 MM

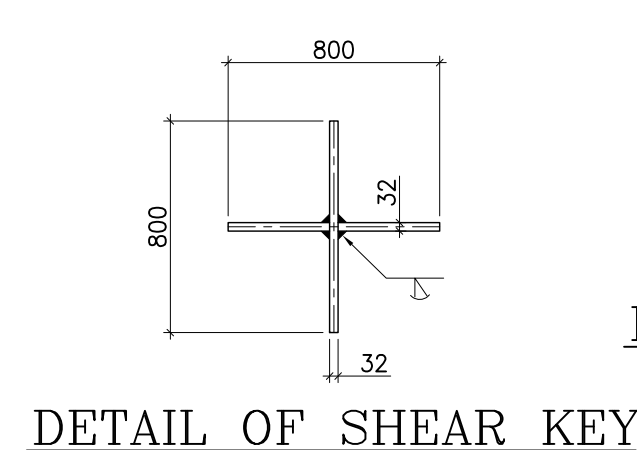
4 HOLES = DIA. OF BOLT + 3 MM

BASE PL. SCHEDULE

DIM MKD.	BP-1/ BP-1M	BP-2	BP-3/ BP-3A	BP-4	REMARKS
A	1500	1500	1500	1500	BASE PLATE DIMENSIONS
B	1050	1050	1050	1050	
C					REFER COLUMN SCHEDULE
D					
E	45	45	45	45	
F	240	320	240	320	
G	180	300	180	300	
J	1200	1200	1200	1200	C/C OF BOLT
K	240	320	240	320	C/C OF BOLT
L	800	800	800	800	SHEAR KEY
M	100	100	100	100	
N	120	120	120	120	WASHER PLATE



DETAIL OF SHEAR KEY FOR BP1 & BP2



DETAIL OF SHEAR KEY FOR BP3 & BP4

DETAIL OF SHEAR KEY FOR BP3A

NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL.(+) 5.60 M.
- FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MAITREE-00-01UTX-LC-100200-PEM
- GRADE OF STEEL- E350, CONFORMING TO SA/S-2062.
- FOR GROUTING OF BASE PLATE REF. DRG. NO. MAITREE-00-01UMA-LB-100111-PEM.
- CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- ALL WORK SHALL BE CARRIED OUT AS PER TECHNICAL SPECIFICATION, SCHEDULE OF ITEMS CONFORMING TO THE QUALITY CHECKS SPECIFIED THEREIN AND IN FIELD QUALITY PLAN.
- ALL WELDS SHALL BE 8mm FILLET CONTINUOUS UNLESS NOTED.

LEGEND

B/S - BOTH SIDE
T.O. - TOP OF
U.N.O. - UNLESS NOTED OTHERWISE
HSPG - HIGH STRENGTH FRACTION GRIP
TYP. - TYPICAL
THK - THICKNESS
CL - CENTRE LINE
HT - HIGH TENSILE
MC - INDIAN STANDARD MEDIUM CHANNEL

BHEL - PROJECT ENGINEERING MANAGEMENT (CIVIL)	
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☐ PLANNING/INFORMATION	
☐ CONSTRUCTION	
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ISSUED BY	
NAME	SACHIN PANDIT
SIGNATURE	
DATE	07/11/2019

3	01.11.19	R.K.	PUNAM	A.N.	REVISED AS PER LATEST INPUT & REVISE AS MKD. 3
2	01.08.19	R.S.	PUNAM	A.N.	REVISED AS PER CUSTOMER COMMENTS & REVISE AS MKD. 2
1					
DATE		ALTERED	CHECKED	APPROVED	NOTE

PROJECT
2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH
(EPC MAIN PLANT PACKAGE)

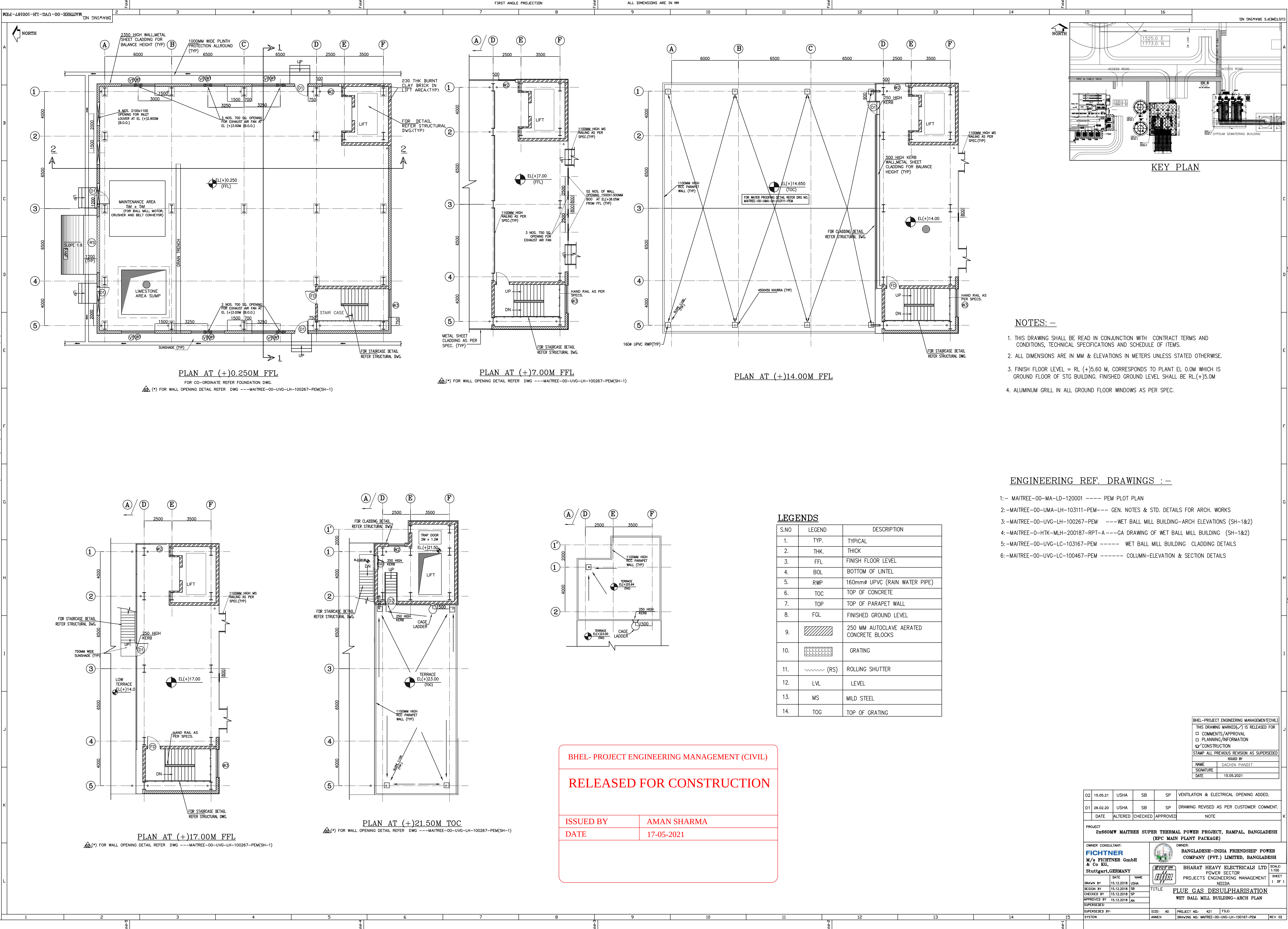
OWNER CONSULTANT:
FICHTNER
M/s FICHTNER GmbH & Co KG,
Stuttgart, GERMANY

OWNER:
BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH
BHARAT HEAVY ELECTRICALS LTD
POWER SECTOR
PROJECTS ENGINEERING MANAGEMENT
NOIDA

DRAWN BY	DATE	NAME
DESIGN BY	27.12.2018	SANJAY
CHECKED BY	27.12.2018	PUNAM
APPROVED BY	27.12.2018	S.P.
SUPERSEDED:		

TITLE
WET BALL MILL BUILDING
PEDESTAL, PLINTH BEAM & BASE PLATE DETAILS

SUPERSUED BY:	SIZE: A1	PROJECT NO.: 421	FILE:
SYSTEM:	ANNEX:	DRAWING NO.: MAITREE-00-UVG-LC-100467-PEM	REV 03



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COMPUTED FILE NAME

- NOTES: -
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 - ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
 - FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL (+)5.0M
 - ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.

ENGINEERING REF. DRAWINGS :-

- MAITREE-00-MA-LD-120001 ---- PEM PLOT PLAN
- MAITREE-00-UMA-LH-103111-PEM --- GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
- MAITREE-00-UVG-LH-100267-PEM --- WET BALL MILL BUILDING-ARCH ELEVATIONS (SH-1&2)
- MAITREE-0-HTK-MLH-200187-RPT-A --- GA DRAWING OF WET BALL MILL BUILDING (SH-1&2)
- MAITREE-00-UVG-LC-103167-PEM ----- WET BALL MILL BUILDING CLADDING DETAILS
- MAITREE-00-UVG-LC-100467-PEM ----- COLUMN-ELEVATION & SECTION DETAILS

S.NO	LEGEND	DESCRIPTION
1.	TYP.	TYPICAL
2.	THK.	THICK
3.	FFL	FINISH FLOOR LEVEL
4.	BOL	BOTTOM OF LINTEL
5.	RWP	160mmØ UPVC (RAIN WATER PIPE)
6.	TOC	TOP OF CONCRETE
7.	TOP	TOP OF PARAPET WALL
8.	FGL	FINISHED GROUND LEVEL
9.		250 MM AUTOCLAVE AERATED CONCRETE BLOCKS
10.		GRATING
11.	(RS)	ROLLING SHUTTER
12.	LVL	LEVEL
13.	MS	MILD STEEL
14.	TOG	TOP OF GRATING

BHEL- PROJECT ENGINEERING MANAGEMENT (CIVIL)

RELEASED FOR CONSTRUCTION

ISSUED BY

AMAN SHARMA

DATE

17-05-2021

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)

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NAME

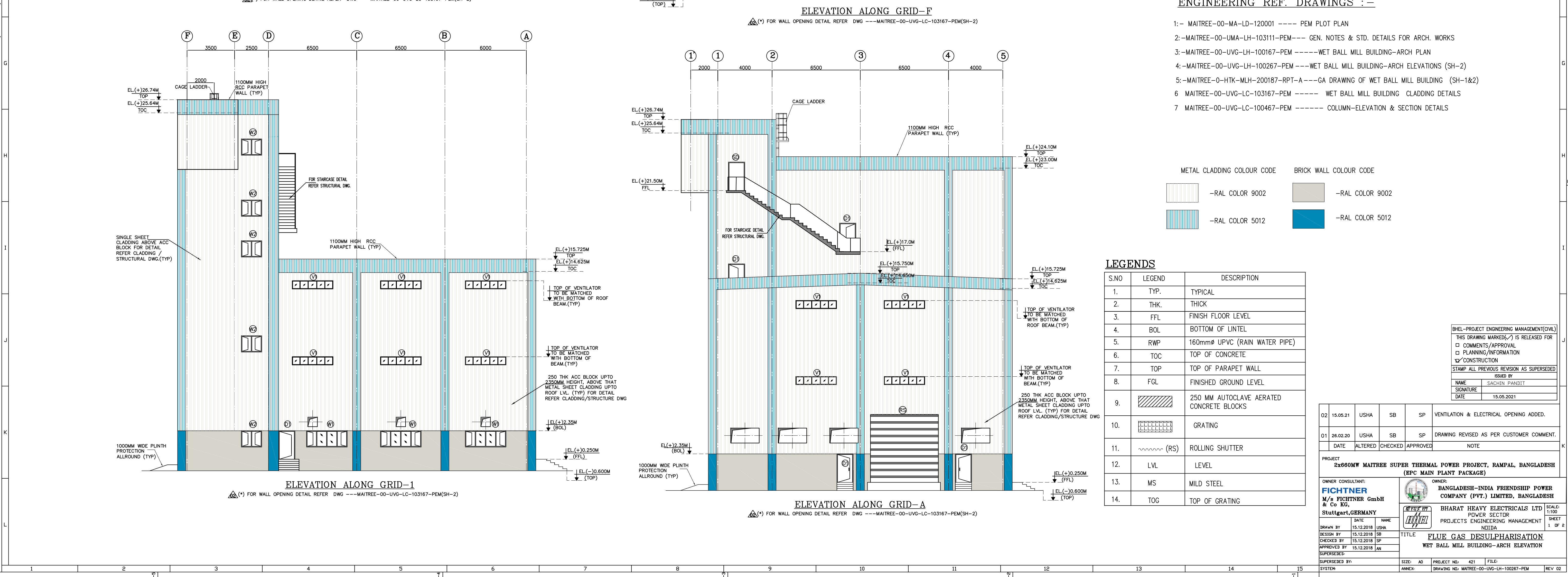
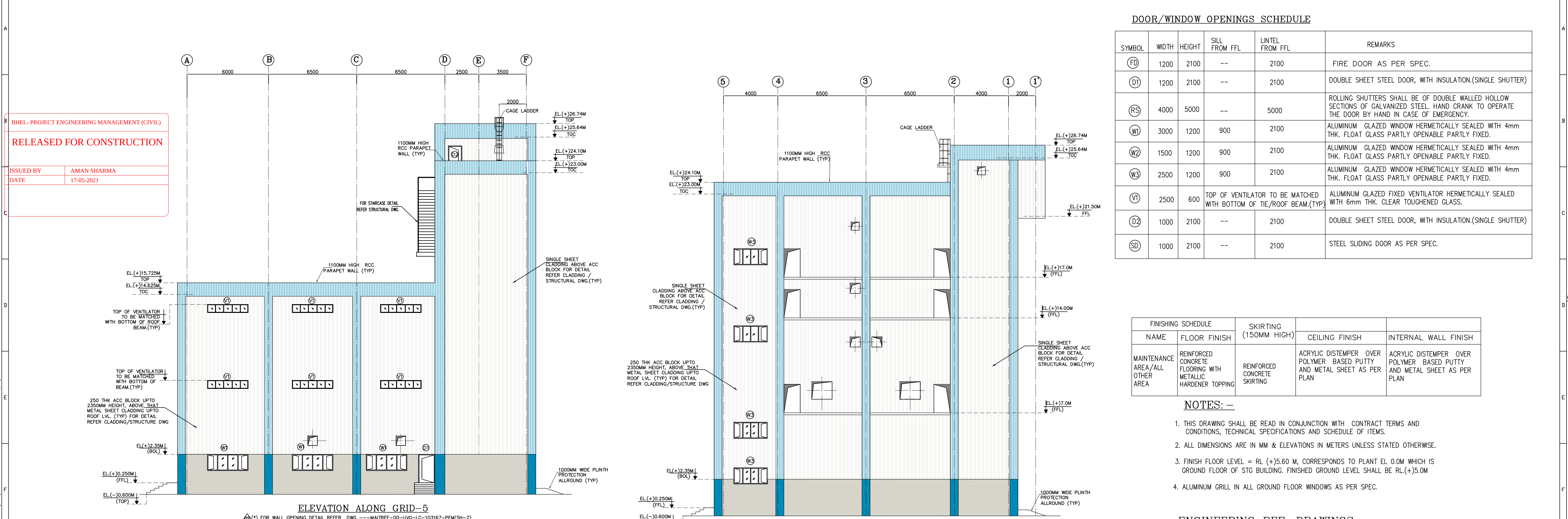
SACHIN PANDIT

SIGNATURE

DATE

15.05.2021

02	15.05.21	USHA	SB	SP	VENTILATION & ELECTRICAL OPENING ADDED.
01	26.02.20	USHA	SB	SP	DRAWING REVISED AS PER CUSTOMER COMMENT.
	DATE	ALTERED	CHECKED	APPROVED	NOTE
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICHTNER M/9 FICHTNER GmbH & Co KG Stuttgart, GERMANY			OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT Noida		
DRAWN BY DATE 15.12.2018 USHA			TITLE FLUE GAS DESULPHURISATION WET BALL MILL BUILDING- ARCH PLAN		
DESIGN BY DATE 15.12.2018 SB			SCALE 1:100		
CHECKED BY DATE 15.12.2018 SP			SHEET 1 OF 1		
APPROVED BY DATE 15.12.2018 AN					
SUPERSEDED BY SYSTEM			PROJECT NO. 421		
			DRAWING NO. MAITREE-00-UVG-LH-100167-PEM		
			REV 02		



DOOR/WINDOW OPENINGS SCHEDULE					
SYMBOL	WIDTH	HEIGHT	SILL FROM FFL	LINTEL FROM FFL	REMARKS
(FD)	1200	2100	--	2100	FIRE DOOR AS PER SPEC.
(D1)	1200	2100	--	2100	DOUBLE SHEET STEEL DOOR, WITH INSULATION.(SINGLE SHUTTER)
(RS)	4000	5000	--	5000	ROLLING SHUTTERS SHALL BE OF DOUBLE WALLED HOLLOW SECTIONS OF GALVANIZED STEEL. HAND CRANK TO OPERATE THE DOOR BY HAND IN CASE OF EMERGENCY.
(W1)	3000	1200	900	2100	ALUMINUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS PARTLY OPENABLE PARTLY FIXED.
(W2)	1500	1200	900	2100	ALUMINUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS PARTLY OPENABLE PARTLY FIXED.
(W3)	2500	1200	900	2100	ALUMINUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS PARTLY OPENABLE PARTLY FIXED.
(V1)	2500	600	TOP OF VENTILATOR TO BE MATCHED WITH BOTTOM OF TIE/ROOF BEAM.(TYP)		ALUMINUM GLAZED FIXED VENTILATOR HERMETICALLY SEALED WITH 6mm THK. CLEAR TOUGHENED GLASS.
(D2)	1000	2100	--	2100	DOUBLE SHEET STEEL DOOR, WITH INSULATION.(SINGLE SHUTTER)
(SD)	1000	2100	--	2100	STEEL SLIDING DOOR AS PER SPEC.

FINISHING SCHEDULE		SKIRTING (150MM HIGH)	CEILING FINISH	INTERNAL WALL FINISH
NAME	FLOOR FINISH			
MAINTENANCE AREA/ALL OTHER AREA	REINFORCED CONCRETE FLOORING WITH METALLIC HARDENER TOPPING	REINFORCED CONCRETE SKIRTING	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY AND METAL SHEET AS PER PLAN	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY AND METAL SHEET AS PER PLAN

- NOTES: -
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 - FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL.(+).5.0M
 - ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.

ENGINEERING REF. DRAWINGS :-

- 1:- MAITREE-00-MA-LD-120001 ---- PEM PLOT PLAN
- 2:-MAITREE-00-UMA-LH-103111-PEM--- GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
- 3:-MAITREE-00-UVG-LH-100167-PEM -----WET BALL MILL BUILDING-ARCH PLAN
- 4:-MAITREE-00-UVG-LH-100267-PEM ---WET BALL MILL BUILDING-ARCH ELEVATIONS (SH-2)
- 5:-MAITREE-0-HTK-MLH-200187-RPT-A---GA DRAWING OF WET BALL MILL BUILDING (SH-1&2)
- 6 MAITREE-00-UVG-LC-103167-PEM ----- WET BALL MILL BUILDING CLADDING DETAILS
- 7 MAITREE-00-UVG-LC-100467-PEM ----- COLUMN-ELEVATION & SECTION DETAILS

METAL CLADDING COLOUR CODE		BRICK WALL COLOUR CODE	
	-RAL COLOR 9002		-RAL COLOR 9002
	-RAL COLOR 5012		-RAL COLOR 5012

S.NO	LEGEND	DESCRIPTION
1.	TYP.	TYPICAL
2.	THK.	THICK
3.	FFL	FINISH FLOOR LEVEL
4.	BOL	BOTTOM OF LINTEL
5.	RWP	160mmø UPVC (RAIN WATER PIPE)
6.	TOC	TOP OF CONCRETE
7.	TOP	TOP OF PARAPET WALL
8.	FGL	FINISHED GROUND LEVEL
9.		250 MM AUTOCLAVE AERATED CONCRETE BLOCKS
10.		GRATING
11.	(RS)	ROLLING SHUTTER
12.	LVL	LEVEL
13.	MS	MILD STEEL
14.	TOG	TOP OF GRATING

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)

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☐ PLANNING/INFORMATION

☒ CONSTRUCTION

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NAME

SIGNED BY

DATE

SACHIN PANDIT

15.05.2021

02

15.05.21

USHA

SB

SP

VENTILATION & ELECTRICAL OPENING ADDED.

01

26.02.20

USHA

SB

SP

DRAWING REVISED AS PER CUSTOMER COMMENT.

DATE

ALTERED

CHECKED

APPROVED

NOTE

PROJECT

2x680MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)

OWNER CONSULTANT:

FICHTNER

M & Co KG

Stuttgart,GERMANY

DATE

15.12.2018

USHA

SB

CHECKED BY

15.12.2018

SP

APPROVED BY

15.12.2018

AN

OWNER:

BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH

BHARAT HEAVY ELECTRICALS LTD

POWER SECTOR

PROJECTS ENGINEERING MANAGEMENT

NRIDA

TITLE

FLUE GAS DESULPHURISATION

WET BALL MILL BUILDING-ARCH ELEVATION

SCALE

1:100

SHEET

1 OF 2

SUPERSEDED BY:

SYSTEM

SIZE

A0

PROJECT NO.

421

FILE

ANNEX

DRAWING NO.

MAITREE-00-UVG-LH-100267-PEM

REV

02



BHEL- PROJECT ENGINEERING MANAGEMENT (CIVIL)

RELEASED FOR CONSTRUCTION

ISSUED BY	AMAN SHARMA
DATE	17-05-2021

ENGINEERING REF. DRAWINGS :-

- 1:- MAITREE-00-MA-LD-120001 ---- PEM PLOT PLAN
- 2:-MAITREE-00-UMA-LH-103111-PEM--- GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
- 3:-MAITREE-00-UVG-LH-100167-PEM -----WET BALL MILL BUILDING--ARCH PLAN
- 4:-MAITREE-00-UVG-LH-100267-PEM ----WET BALL MILL BUILDING--ARCH ELEVATIONS (SH-1)
- 5:-MAITREE-00-HTK-MLH-200187-RPT-A---G&A DRAWING OF WET BALL MILL BUILDING (SH-1&2)

NOTES: —

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE
3. FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL.(+)5.0M
4. ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.

METAL CLADDING COLOUR CODE

BRICK WALL COLOUR CODE

-RAL COLOR 9002

RAL COLOR 9002

-RAI COLOR 5012

—RAL COLOR 5012

LEGENDS

S.NO	LEGEND	DESCRIPTION
1.	TYP.	TYPICAL
2.	THK.	THICK
3.	FFL	FINISH FLOOR LEVEL
4.	BOL	BOTTOM OF LINTEL
5.	RWP	160mm $\varnothing$ UPVC (RAIN WATER PIPE)
6.	TOC	TOP OF CONCRETE
7.	TOP	TOP OF PARAPET WALL
8.	FGL	FINISHED GROUND LEVEL
9.		250 MM AUTOCLAVE AERATED CONCRETE BLOCKS
10.		GRATING
11.	 (RS)	ROLLING SHUTTER
12.	LVL	LEVEL
13.	MS	MILD STEEL
14.	TOG	TOP OF GRATING

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)

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□ COMMENTS/APPROVAL

☐ PLANNING/INFORMATION

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STAMP ALL PREVIOUS REVISION AS SUPERSEDED

NAME	SACHIN PANDIT
------	---------------

SIGNATURE	
DATE	10/20/2011

DATE	15.05.21
------	----------

ATION: A. ELECTRONIC OPENING: ADDED

					LIFELIATION & ELECTION OFFENSE ADDED
--	--	--	--	--	--------------------------------------

02	15.05.21	USHA	SB	SP	VENTILATION & ELECTRICAL OPENING ADDED.
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[illegible]

01	26.02.20	USHA	SB	SP	DRAWING REVISED AS PER CUSTOMER COMMENT.
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	DATE	ALTERED	CHECKED	APPROVED	NOTE
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PROJECT

2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH

(EPC MAIN PLANT PACKAGE)	

OWNER CONSULTANT: OWNER: BANGLADESH INDIA FRIENDSHIP POWER

FICHTNER
BANGLADESH-INDIA FRIENDSHIP POWER
COMPANY (PVT.) LIMITED, BANGLADESH

M/s FICHTNER GmbH & Co KG,		COMPLAINT (1/2017) LIMITED, UNRESOLVED	
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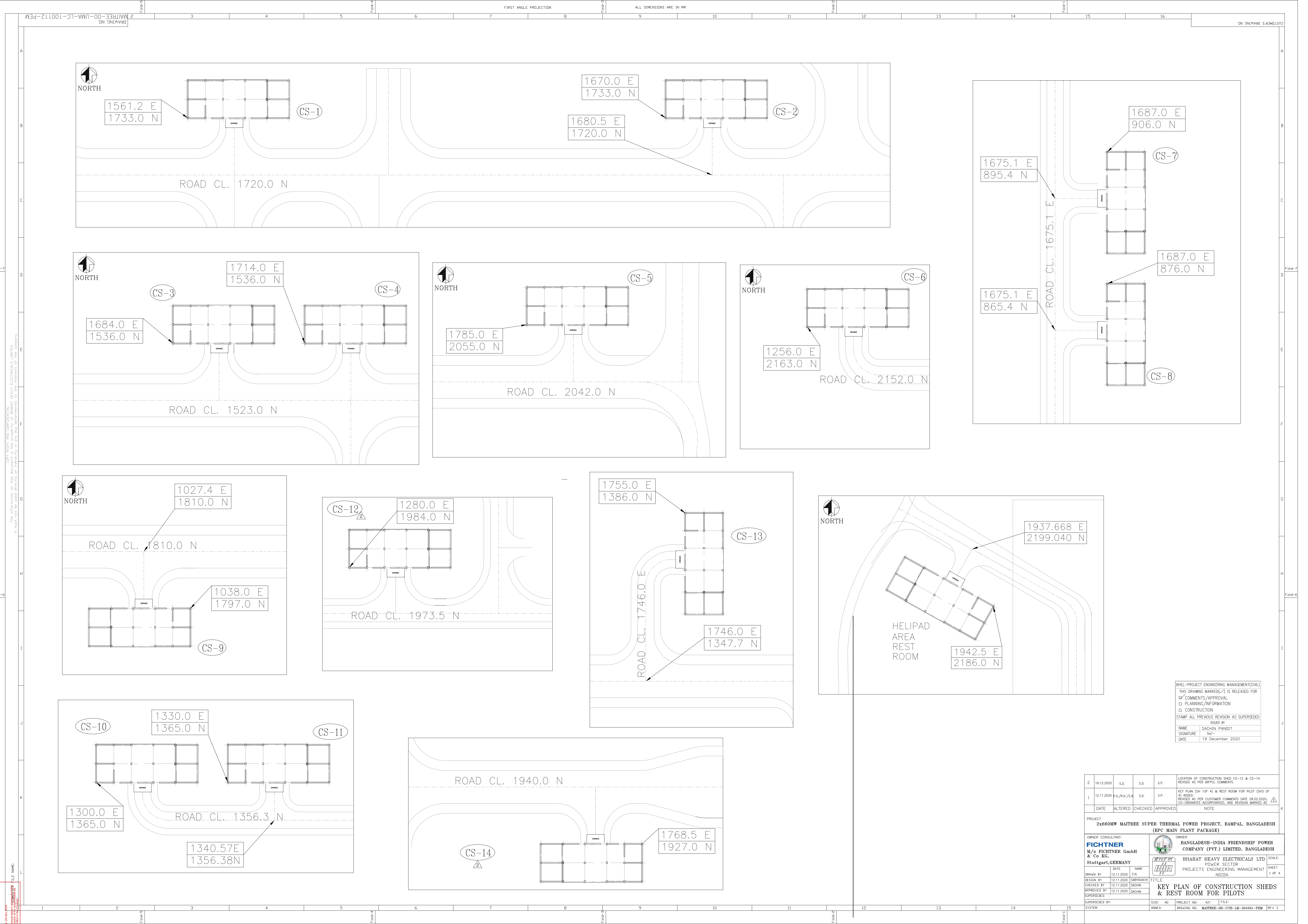
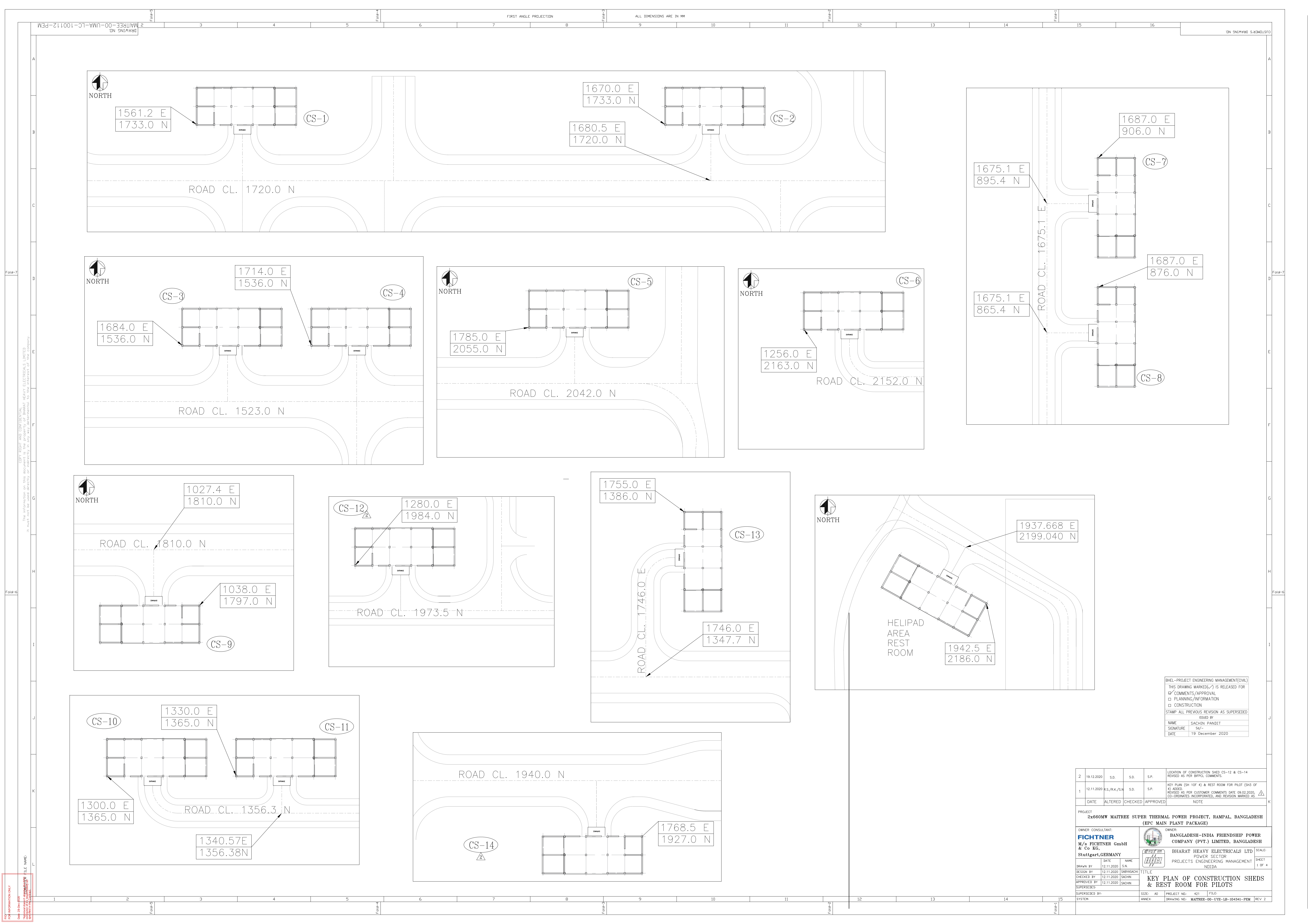
Stuttgart, GERMANY

	DATE	NAME		POWER SYSTEM PROJECTS ENGINEERING MANAGEMENT	SHE 2
--	------	------	---	---	----------

DRAWN BY	15.12.2018	USHA	NOIDA	E
DESIGN BY	15.12.2018	SR	TITLE	

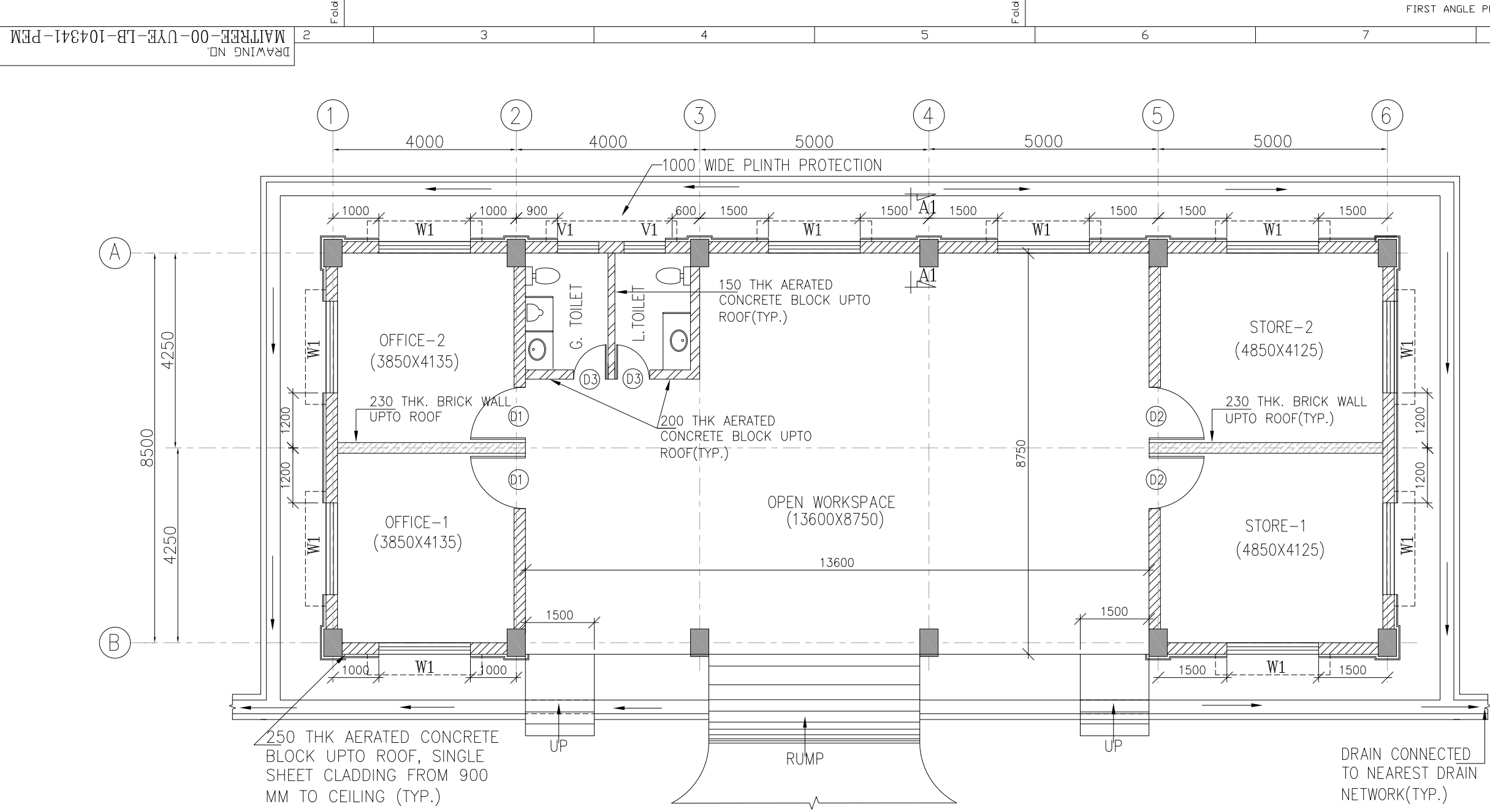
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it must not be used directly or indirectly in any way detrimental to the interest of the company.

COMPUTER FILE NAME:



2	19.12.2020	S.D.	S.D.	S.P.	LOCATION OF CONSTRUCTION SHED CS-12 & CS-14 REVISED AS PER BHEPC COMMENTS.				
1	12.11.2020	R.S./R.K./S.N	S.D.	S.P.	KEY PLAN (SH 10F 4) & REST ROOM FOR PILOT (SHS OF 4) ADDED REVISED AS PER CUSTOMER COMMENTS DATE 09.02.2020. CO-ORDINATES INCORPORATED, AND REVISION MARKED AS				
DATE					ALTERED	CHECKED	APPROVED	NOTE	
PROJECT									
2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)									
OWNER CONSULTANT:				OWNER:					
FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY				 BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH					
DRAWN BY				BHARAT HEAVY ELECTRICALS LTD				SCALE	
DATE				POWER SECTOR				SHEET 1 OF 4	
S.N.				PROJECTS ENGINEERING MANAGEMENT NIDIJA					
DESIGN BY				TITLE					
12.11.2020									
SABYASACHI									
CHECKED BY									
12.11.2020									
SACHIN									
APPROVED BY									
12.11.2020									
SACHIN									
SUPERSEDED BY									
SUPERSEDED BY									
SYSTEM				SIZE: A0				PROJECT NO: 421	FILE
ANNEX				DRAWING NO:				MAITREE-00-UYE-LB-104341-PEM	REV 2

FOR INFORMATION ONLY
Date: 30 Dec 2020
Author: Sachin Pandit
Checked: Sachin Pandit
Approved: Sachin Pandit
Signature: Sachin Pandit
Stamp: Sachin Pandit

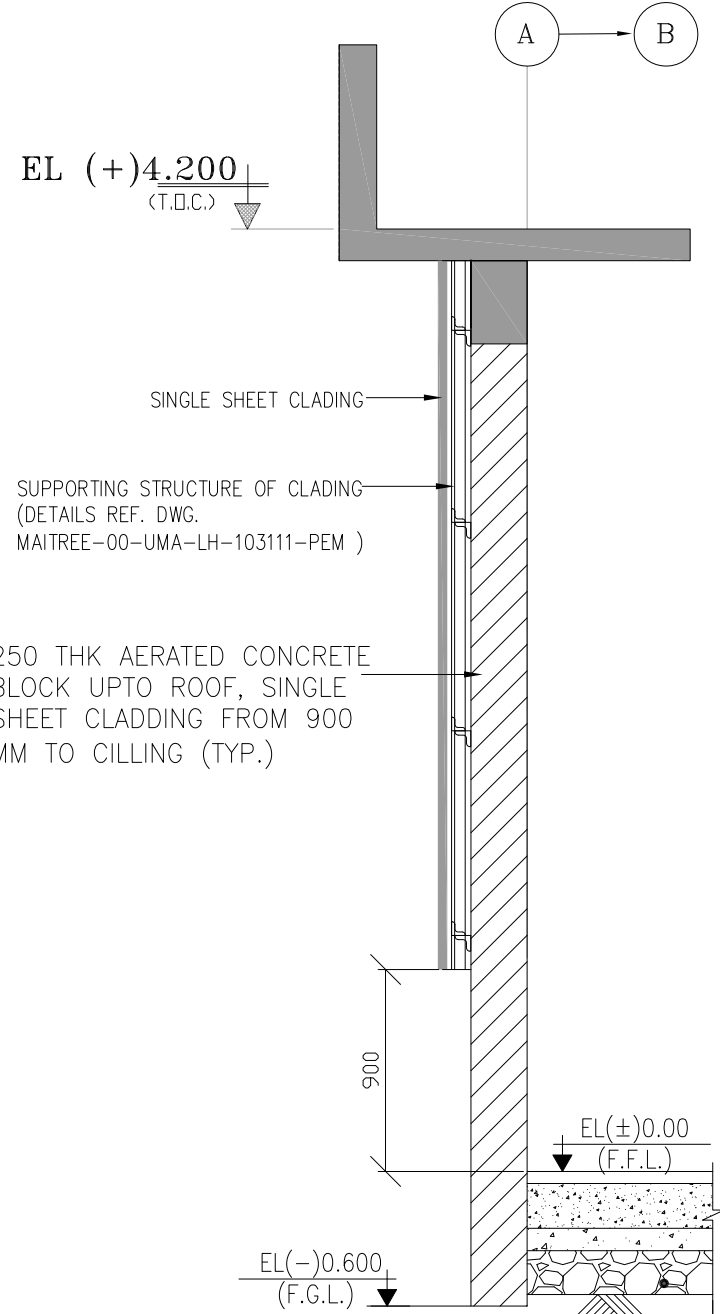


GROUND FLOOR PLAN AT EL(±)0.000M
(COVERING AREA OF 2 SHEDS)
(CONSTRUCTION SHED CS-1 TO 14, FOR NORTH
DIRECTION AND ORIENTATION REFER KEY PLAN)

DOOR/WINDOW OPENINGS SCHEDULE

SYMBOL	WIDTH	HEIGHT	SILL FROM FFL	LINTEL FROM FFL	REMARKS
D1	1200	2100	--	2100	ALUMINIUM GLAZED DOOR WITH 5.5mm THK. CLEAR FLOAT GLASS.(SINGLE SHUTTER)
D2	1200	2100	--	2100	DOUBLE SHEET STEEL DOOR, WITH INSULATION.(SINGLE SHUTTER)
D3	750	2100	--	2100	SINGLE SHUTTER SOLID CORE PVC DOOR (25mm THK.) WITH PVC FRAME (SINGLE SHUTTER)
W1	2000	1200	900	2100	ALUMINIUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS PARTLY OPENABLE PARTLY FIXED.
V1	900	600	1900	2500	ALUMINIUM GLAZED VENTILATOR TOP HUNG WITH 4mm THICK GROUND GLASS. 330MM Ø EXHAUST FAN SHALL BE PROVIDED IN VENTILATOR

FINISHING SCHEDULE				
NAME	FLOOR FINISH	SKIRTING/DADO (150MM HIGH)	CEILING FINISH	INTERNAL WALL FINISH
WORKSPACE AREA / STORE ROOM	REINFORCED CONCRETE WITH HARD SCREED TOPPING CARBORUNDUM TYPE (25MM THICK CONCRETE TILE WITH OIL RESISTANT EPOXY COATING(150 MICRON THICK 2 LAYER)	REINFORCED CONCRETE WITH HARD SCREED TOPPING CARBORUNDUM TYPE (25MM THICK CONCRETE TILE WITH OIL RESISTANT EPOXY COATING(150 MICRON THICK 2 LAYER)	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY
TOILET	GLAZED NON SLIP FULLY VITRIFIED CERAMIC TILES 7MM THK.	GLAZED CERAMIC TILES (UP TO 2300 HIGH)	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY
OFFICE	VITRIFIED TILES 600X600MM 10 MM THK.	VITRIFIED TILES	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY.



SECTION A1-A1

DETAILS: (COVERING AREA OF 2 SHEDS)

TOTAL COVERED AREA — 210 SQ.M.			
AREA	NUMBER	AREA (IN SQ.M.)	TOTAL AREA (IN SQ.M.)
OFFICE	2	15.98	31.96
STORE	2	20.13	40.26
TOILET BLOCK	1	10.45	10.45
WORKSPACE	1	108.61	108.61

SCHEDULE OF EXTERNAL FINISHES

EXTERIOR PLASTERING	18 MM THK. WITH 1:6 CEMENT SAND MORTAR
INTERIOR PLASTERING	12MM WITH 1:6 CEMENT SAND MORTAR
EXTERIOR FINISHING	ACRYLIC BASED WEATHER COAT PAINT
RAIN WATER PIPE	160ø HDPE RAIN WATER PIPE

NOTES: —

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL.(+).5.0M
- ALUMINIUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.

REFERENCE DRAWINGS : —

- MAITREE-00-MA-LD-120001-PEM — PLOT PLAN
- MAITREE-00-UMA-LH-103111-PEM — GENERAL NOTES AND STD. DETAILS FOR ARCH. WORKS

LEGENDS

S.NO	LEGEND	DESCRIPTION
1.	TYP	TYPICAL
2.	THK	THICK
3.	FGL	FINISH GROUND LEVEL
4.	FFL	FINISH FLOOR LEVEL
5.	LVL	LEVEL
6.	T.O.C	TOP OF CONCRETE
7.	T.O.P	TOP OF PARAPET
8.	B.O.L	BOTTOM OF LINTEL
9.	CONC.	CONCRETE
10.	DPC	DAMP PROOF COURSE
11.	SINGLE SHEET METAL GLAZING RAL-9002	
12.	SINGLE SHEET METAL GLAZING RAL-5012	
13.	250 THK AREATED CONC BLOCK	
14.	200/150 THK AREATED CONC BLOCK	
15.	PAIN RAL-9002	
16.	PAIN RAL-5012	
17.	230 THICK BRICK WALL	

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)

THIS DRAWING MARKED(✓) IS RELEASED FOR

☒ COMMENTS/APPROVAL

☐ PLANNING/INFORMATION

☐ CONSTRUCTION

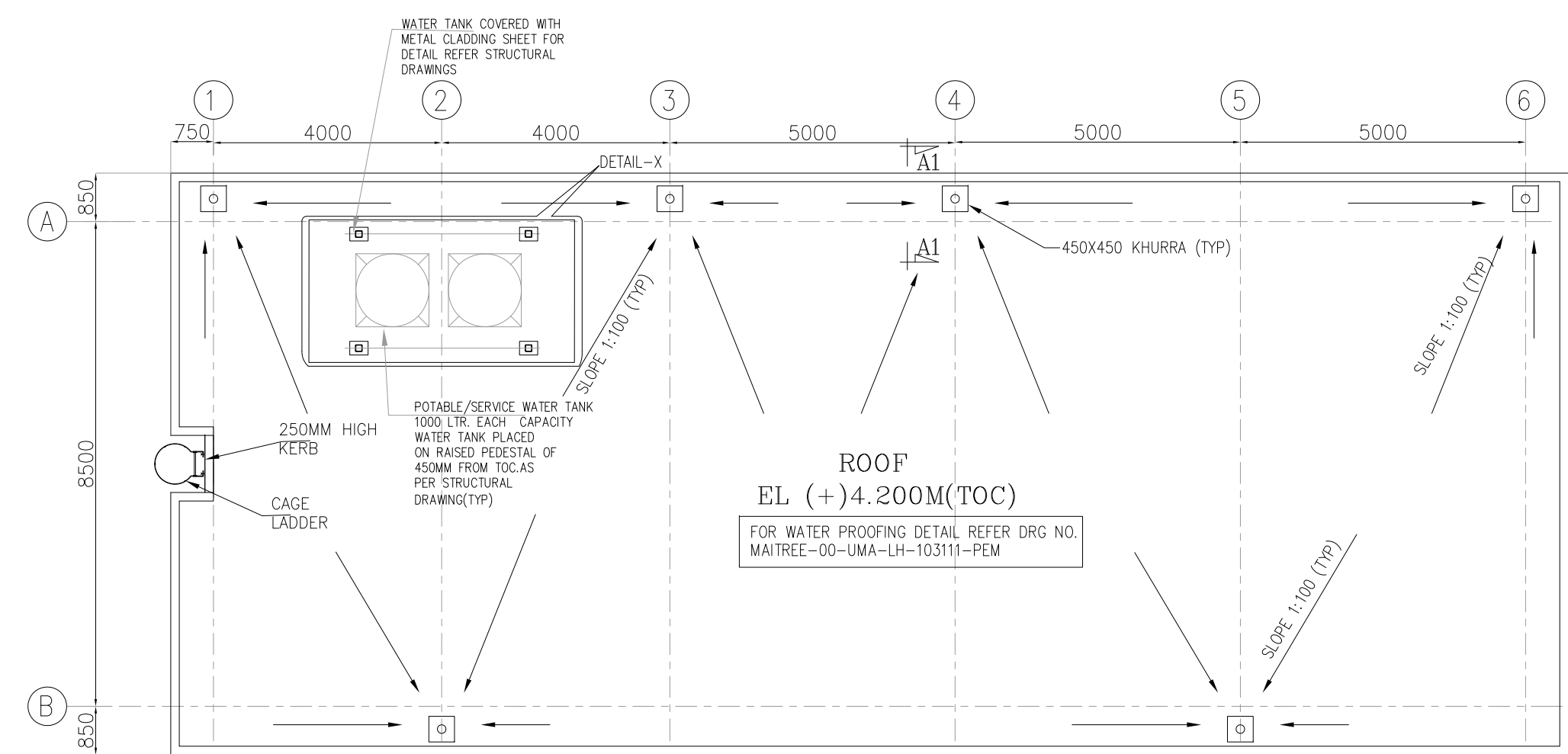
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ISSUED BY

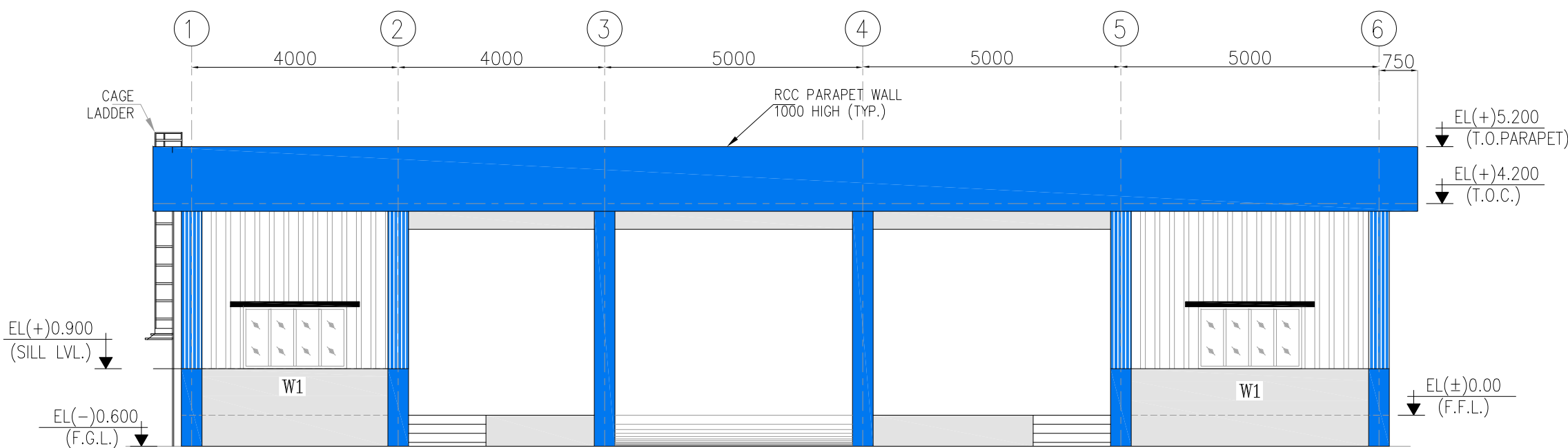
NAME SACHIN PANDIT

SIGNATURE Sa/-

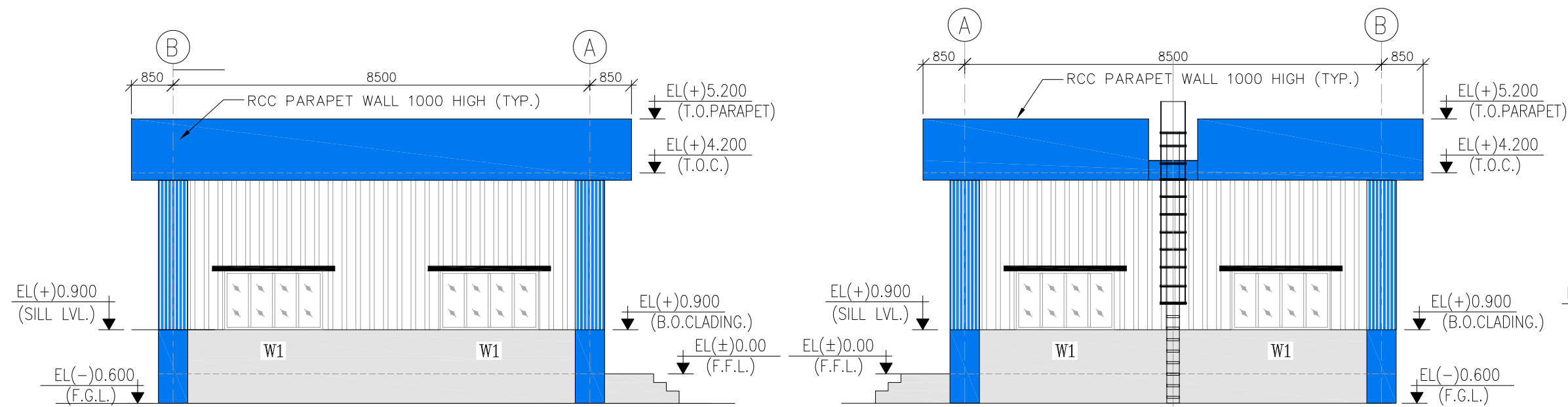
DATE 19 December 2020



TERRACE PLAN AT EL+4.20M (TOC)

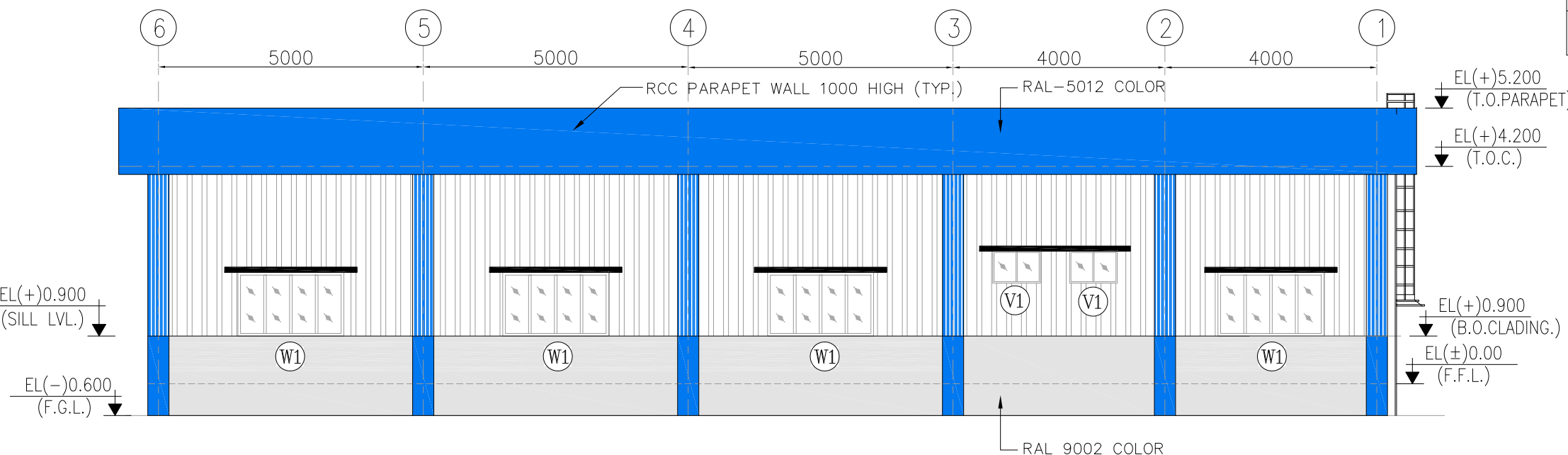


FRONT ELEVATION



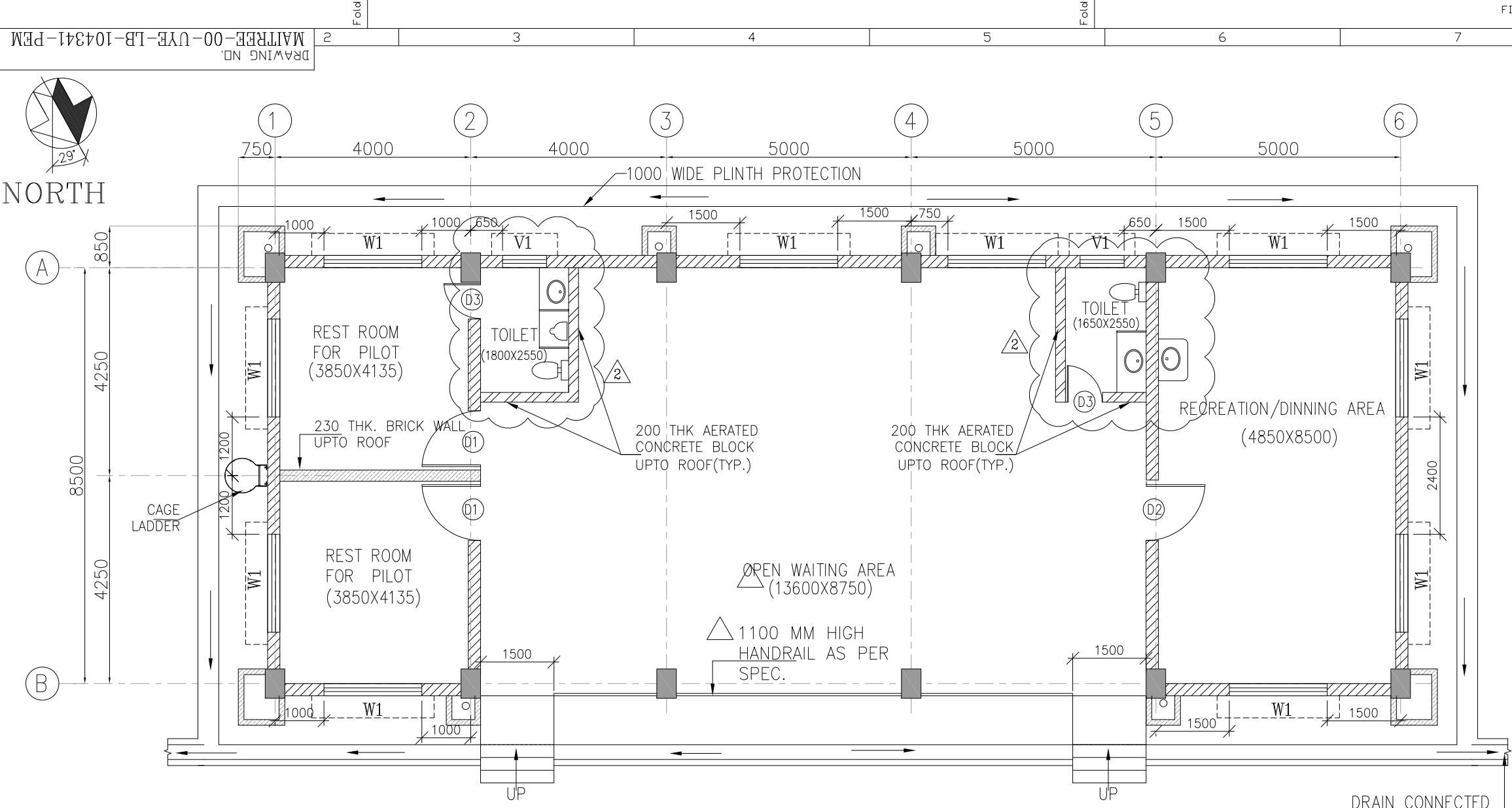
LEFT SIDE ELEVATION

RIGHT SIDE ELEVATION

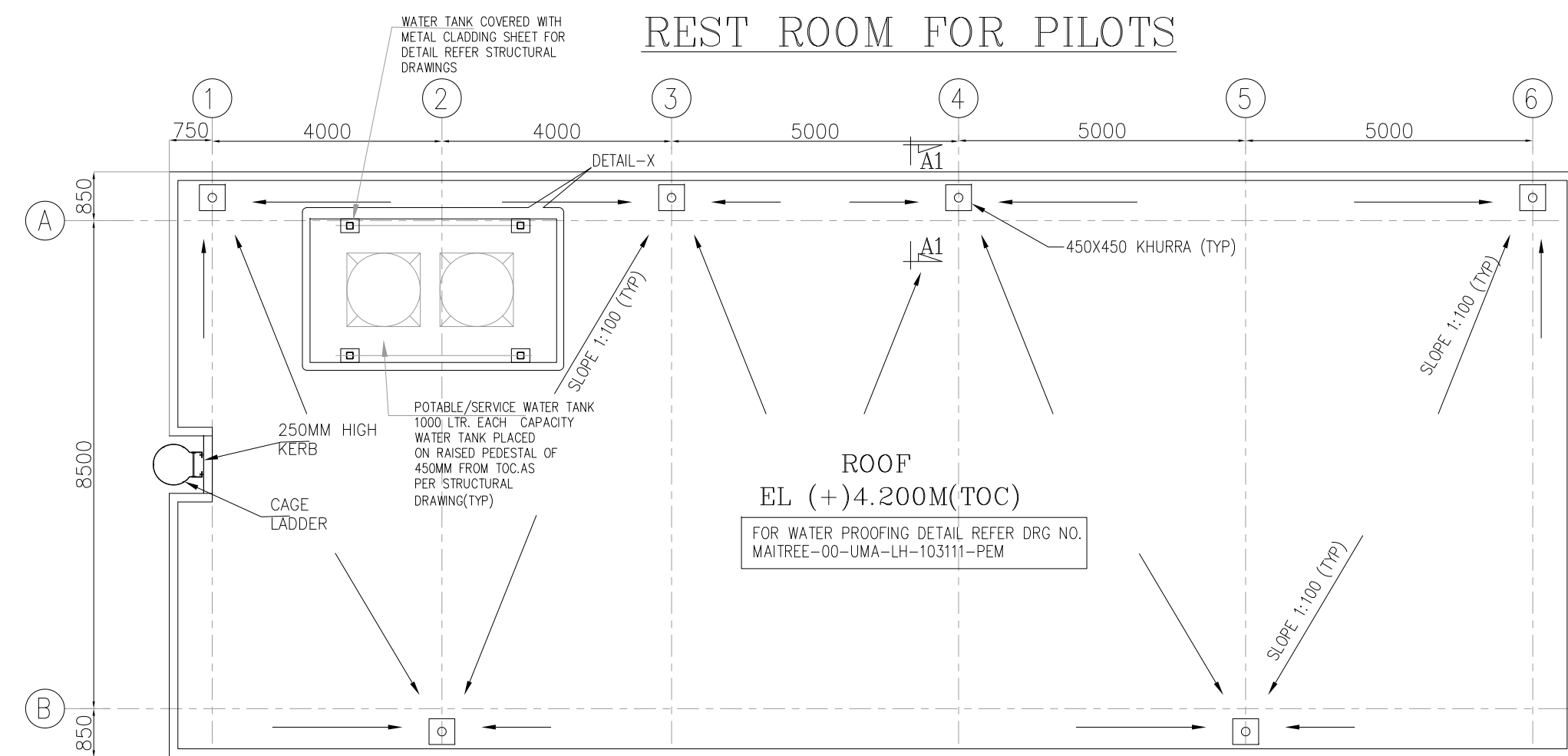


REAR ELEVATION

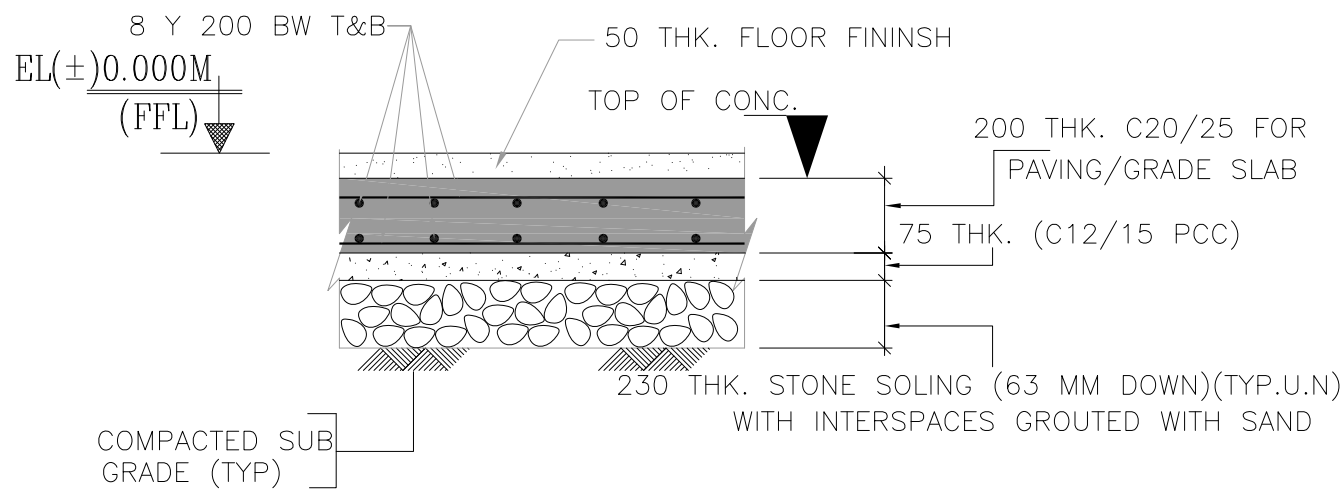
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1	12.11.2020	R.S./R.K./S.N	S.D.	S.P.	KEY PLAN (SH TOF 4) & REST ROOM FOR PILOT (SH3 OF 4) ADDED. REVISED AS PER CUSTOMER COMMENTS DATE 09.02.2020. CO-ORDINATES INCORPORATED, AND REVISION MARKED AS
DATE		ALTERED	CHECKED	APPROVED	NOTE
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY			OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA		
DRAWN BY DESIGN BY CHECKED BY APPROVED BY SUPERSEDED:			DATE 03.02.2020 03.02.2020 03.02.2020 03.02.2020 NAME RAJENDRA PUNAM S.P.		
SUPERSEDED BY:			SIZE: A1 PROJECT NO: 421 FILE:		
SYSTEM			ANNEX: DRAWING NO: MAITREE-00-UYE-LB-104341-PEM REV 02		



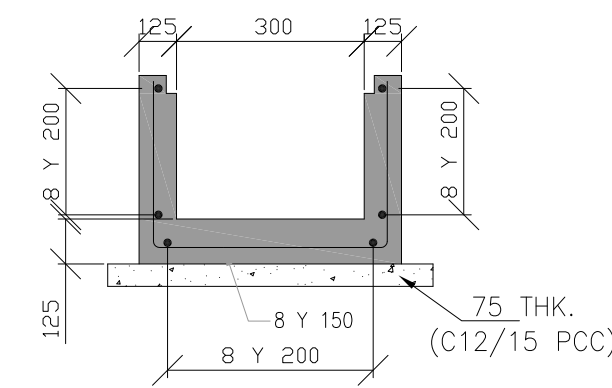
GROUND FLOOR PLAN AT EL(±)0.000M



TERRACE PLAN AT EL+4.20M (TOC)



TYP. DET. OF GRADE SLAB

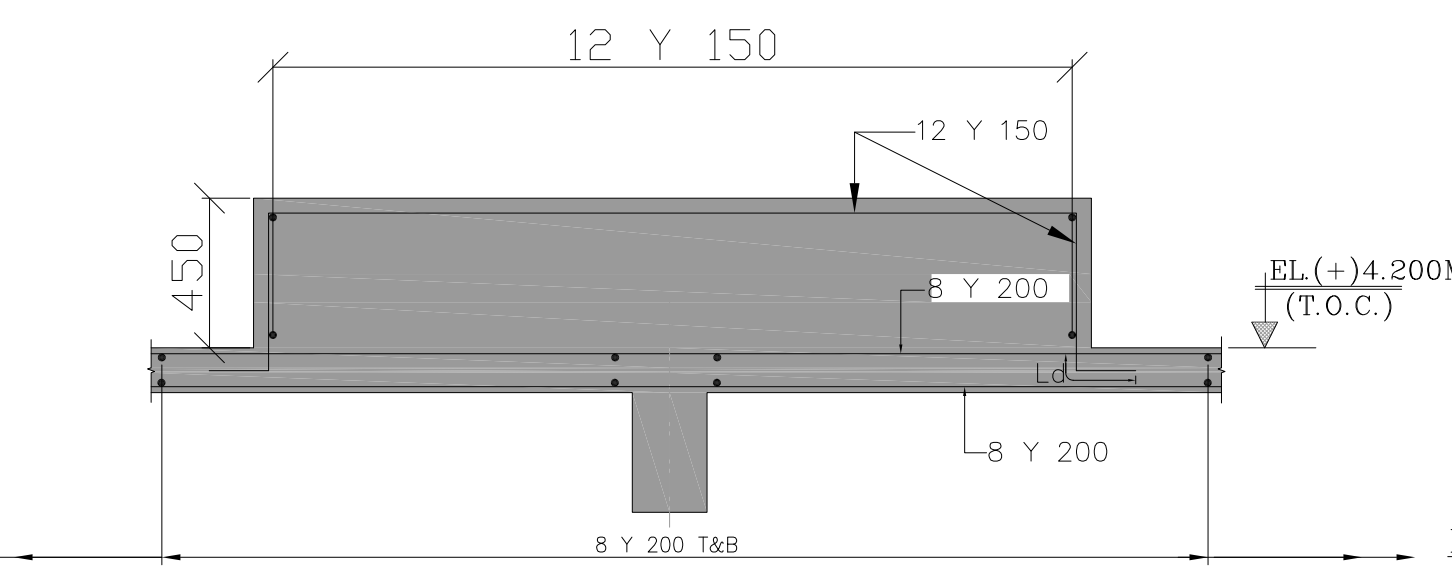


TYPICAL DRAIN REINF. DETAILS

FINISHING SCHEDULE		SKIRTING/DADO (150MM HIGH)	CEILING FINISH	INTERNAL WALL FINISH
NAME	FLOOR FINISH			
OPEN WAITING AREA	VITRIFIED TILES	VITRIFIED TILES	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY
REST ROOM FOR LADIES/GENTS	600X600MM 10 MM THK.			
TOILET	GLAZED NON SLIP FULLY VITRIFIED CERAMIC TILES 7MM THK.	GLAZED CERAMIC TILES (UP TO 2300 HIGH)	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY

DOOR/WINDOW OPENINGS SCHEDULE

SYMBOL	WIDTH	HEIGHT	SILL FROM FFL	INTEL FROM FFL	REMARKS
(D1)	1200	2100	---	2100	35mm THK. PARTICLE BOARD SOLID CORE FLUSH DOOR WITH STEEL FRAME
(D2)	1200	2100	---	2100	ALUMINIUM GLAZED DOOR WITH 5.5mm THK. CLEAR FLOAT GLASS.(SINGLE SHUTTER)
(D3)	750	2100	---	2100	SOLID CORE PVC DOOR (25mm THK.) WITH PVC FRAME (SINGLE SHUTTER)
(W1)	2000	1200	900	2100	ALUMINIUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS. PARTLY OPENABLE. PARTLY FIXED.
(V1)	900	600	1900	2500	ALUMINIUM GLAZED VENTILATOR TOP HUNG WITH 4mm THICK GROUND GLASS. 330MM # EXHAUST FAN SHALL BE PROVIDED IN VENTILATOR



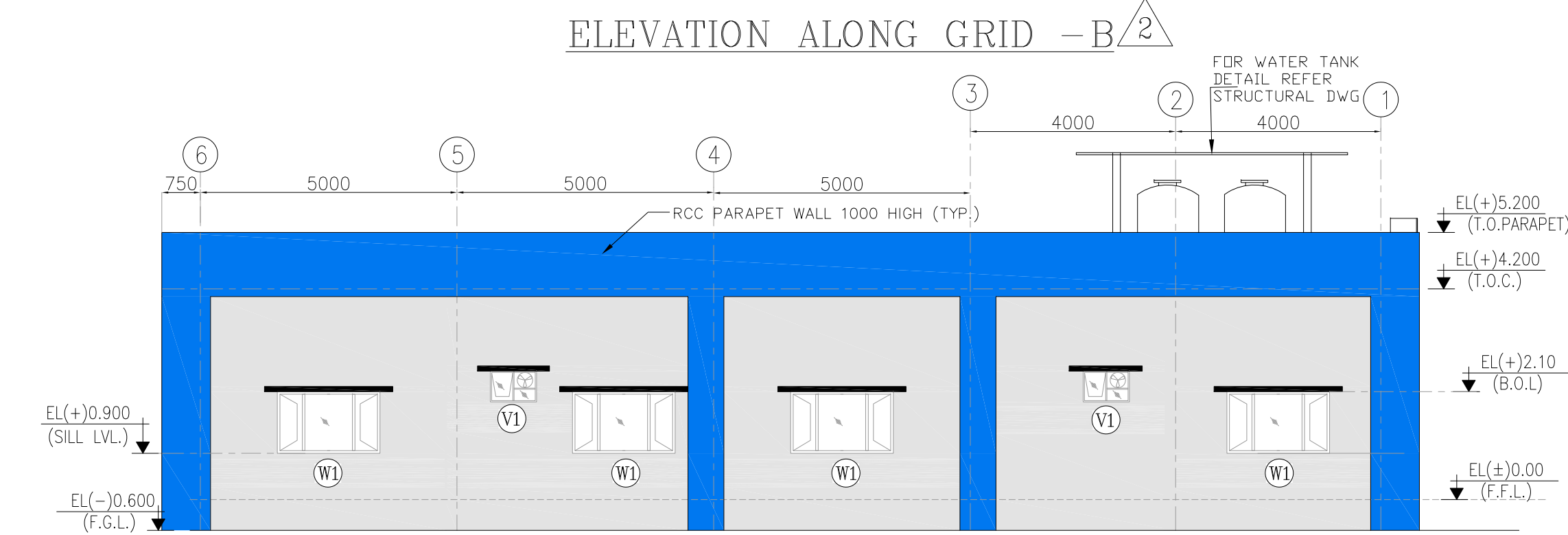
SECTION 4-4

(BEAM REINF. NOT SHOWN FOR Celerity)

DETAILS: (COVERING AREA OF 2 SHEDS)			
AREA	NUMBER	AREA (IN SQ.M.)	TOTAL AREA (IN SQ.M.)
REST ROOMS FOR PILOTS	2	15.98	31.96
RECREATION/DINNING	1	40.26	40.26
TOILET BLOCK	1	10.45	10.45
WAITING AREA	1	108.61	108.61

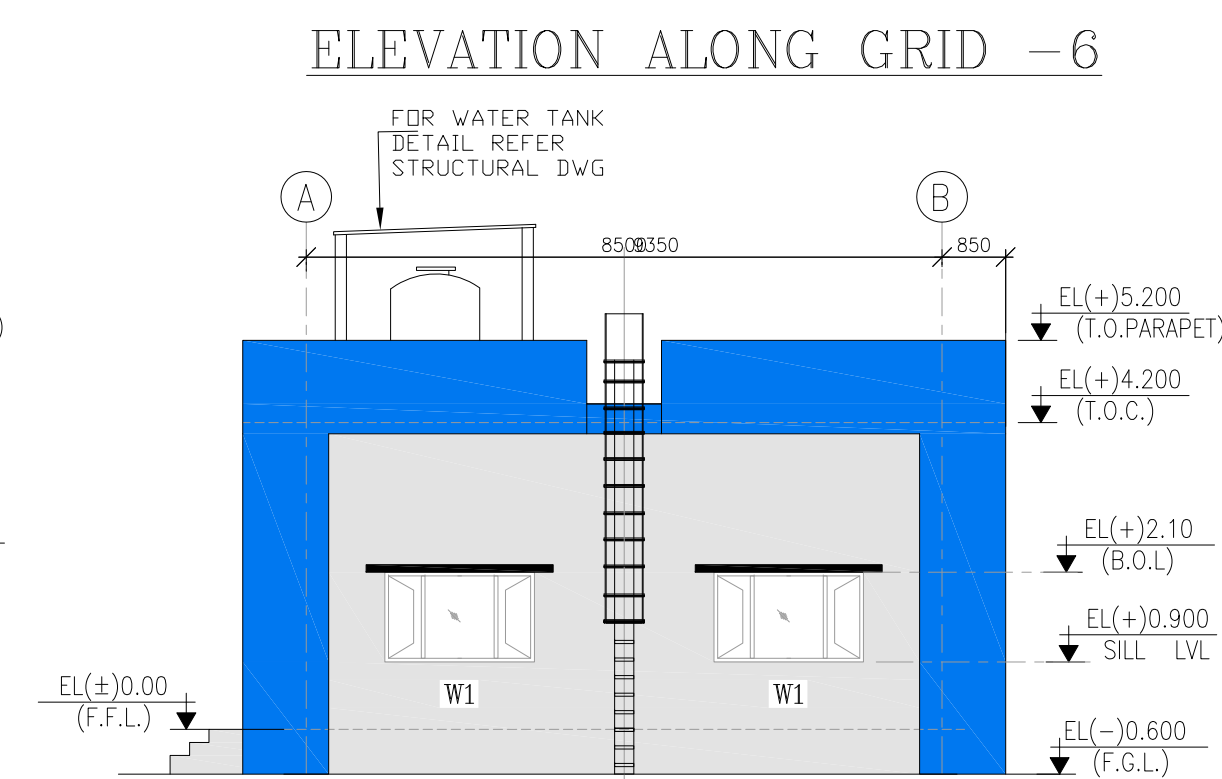
SCHEDULE OF EXTERNAL FINISHES

EXTERIOR PLASTERING	18 MM THK. WITH 1:6 CEMENT SAND MORTAR
INTERIOR PLASTERING	12MM WITH 1:6 CEMENT SAND MORTAR
EXTERIOR FINISHING	ACRYLIC BASED WEATHER COAT PAINT
RAIN WATER PIPE	160# HDPE RAIN WATER PIPE



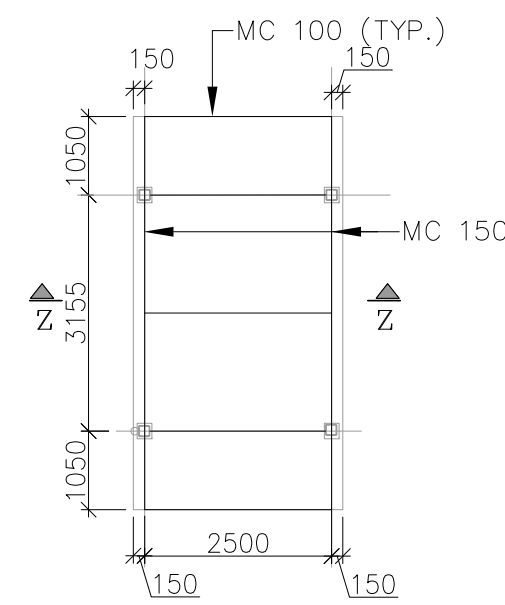
ELEVATION ALONG GRID -B

ELEVATION ALONG GRID -A

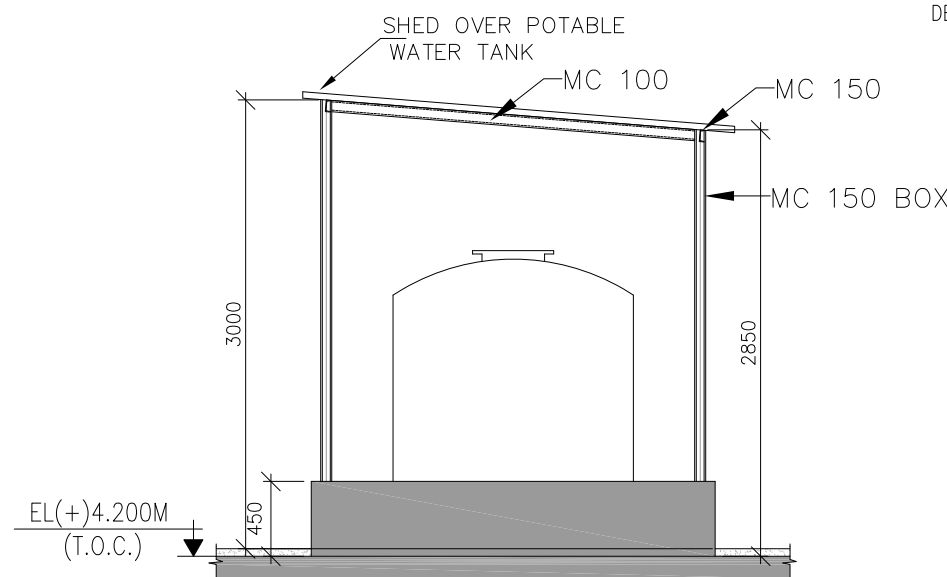


ELEVATION ALONG GRID -6

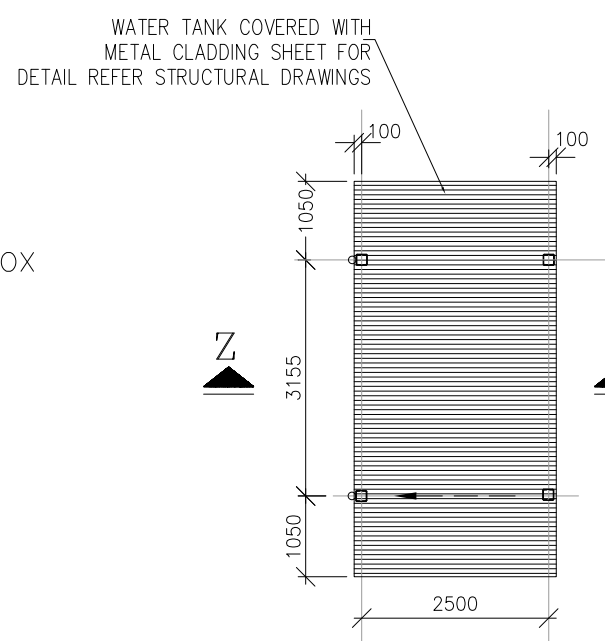
ELEVATION ALONG GRID -1



DETAIL-Y
METAL ROOF
SHED OVER WATER TANK



SECTION Z-Z



DETAIL-X
METAL ROOF
SHED OVER WATER TANK

LEGENDS

S.NO	LEGEND	DESCRIPTION
1.	TYP	TYPICAL
2.	THK	THICK
3.	FGL	FINISH GROUND LEVEL
4.	FFL	FINISH FLOOR LEVEL
5.	LVL	LEVEL
6.	T.O.C	TOP OF CONCRETE
7.	T.O.P	TOP OF PARAPET
8.	B.O.L	BOTTOM OF INTEL
9.	CONC.	CONCRETE
10.	DPC	DAMP PROOF COURSE
11.		250 THK AERATED CONC. BLOCK
12.		200/150 THK AERATED CONC. BLOCK
13.		PAINT RAL-9002
14.		PAINT RAL-5012
15.		115/230 THICK BRICK WALL

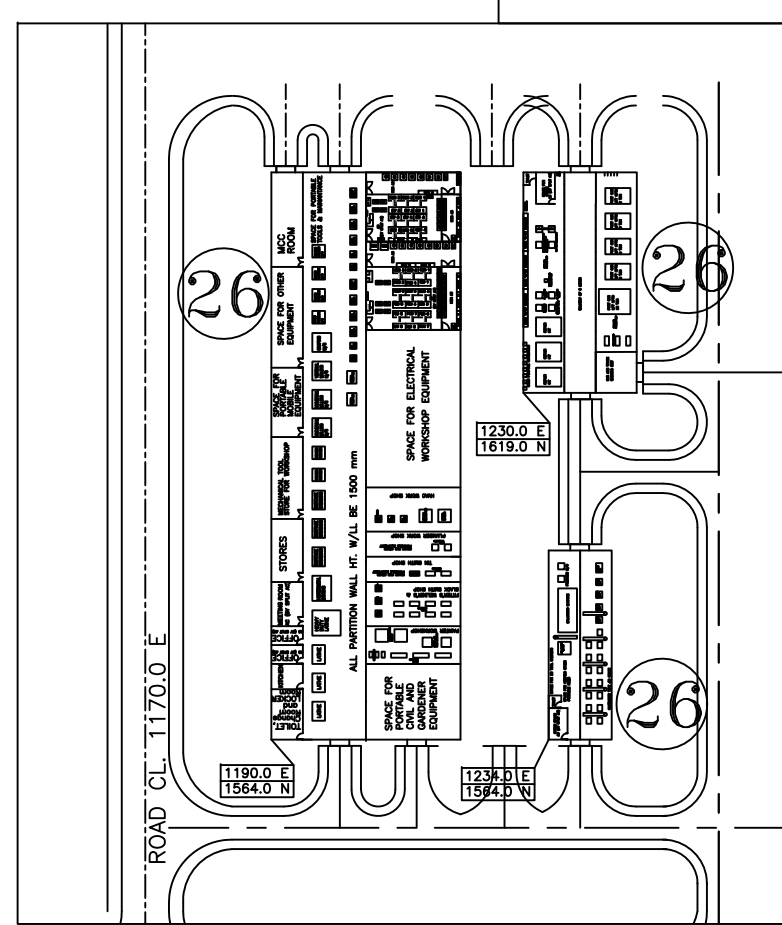
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1	12.11.2020	R.S./R.K./S.N	S.D.	S.P.	KEY PLAN (SH 10F 4) & REST ROOM FOR PILOT (SH3 OF 4) ADDED. REVISED AS PER CUSTOMER COMMENTS DATE 09.02.2020. CO-ORDINATES INCORPORATED, AND REVISION MARKED AS 1
DATE ALTERED CHECKED APPROVED NOTE					
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY			OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH		
DRAWN BY DATE 03.02.2020 RAJENDRA			BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA		
DESIGN BY 03.02.2020 PUNAM			TITLE HELIPAD AREA REST ROOM FOR PILOTS ARCHITECTURE DETAILS		
CHECKED BY 03.02.2020 S.P.			SIZE: A1 PROJECT NO: 421 FILE: ANNEX: DRAWING NO: MAITREE-00-UYE-LB-104341-PEM		
APPROVED BY 03.02.2020 S.P.			REV 02		
SUPERSEDED BY:					

FRAMING ELEVATION ON AXIS-01
(ALL ELEVATIONS SHOWN ARE T.O.S. (TYP) (U.N.O.))FRAMING ELEVATION ON AXIS-02
(ALL ELEVATIONS SHOWN ARE T.O.S. (TYP) (U.N.O.))FRAMING ELEVATION ON AXIS-03
(ALL ELEVATIONS SHOWN ARE T.O.S. (TYP) (U.N.O.))FRAMING ELEVATION ON AXIS-04
(ALL ELEVATIONS SHOWN ARE T.O.S. (TYP) (U.N.O.))

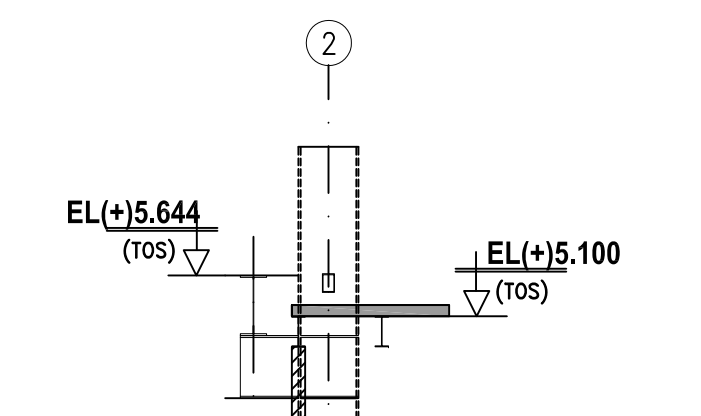
FRAMING ELEVATION ON GRID-A

FRAMING ELEVATION ON GRID-R

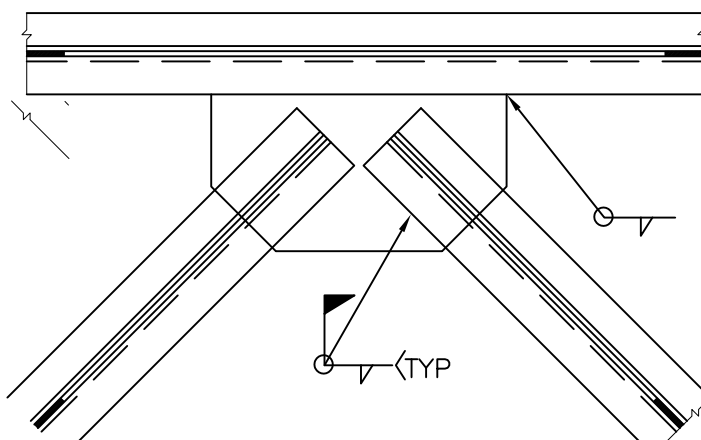
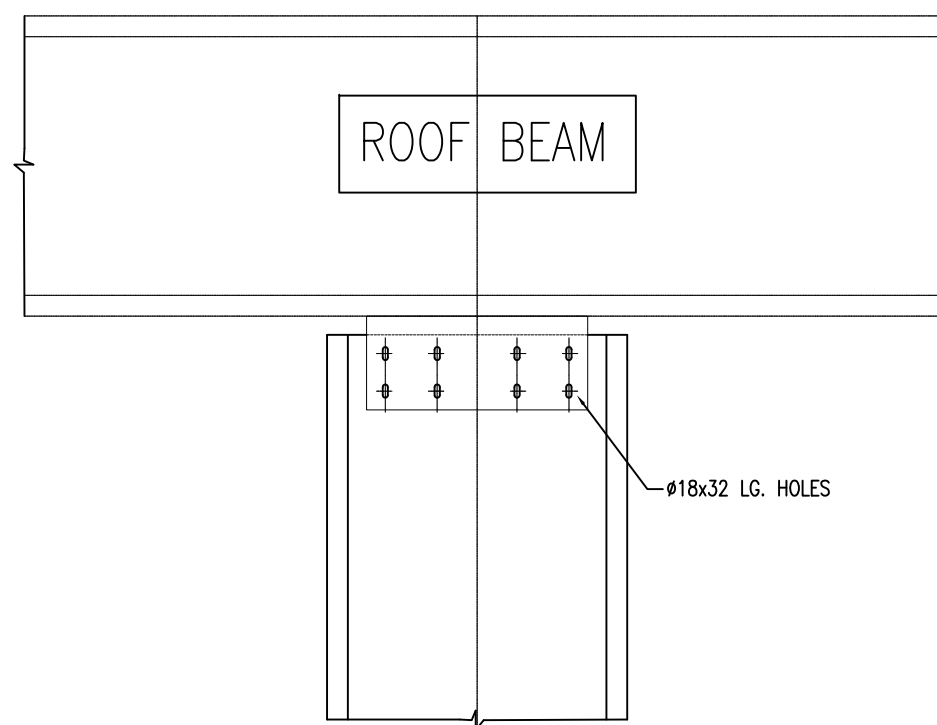
FRAMING ELEVATION ON GRID-M



KEY PLAN



SECTION 1-1

DETAIL AT - 'C'
(SCALE 1:20)

DETAIL AT - 'D'

NOTES

- THIS DRAW/NG SHALL BE READ IN CONJUNCTION W/TH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL(+) 5.60 M.
- FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MATREE-00-UTX-LC-100200-PEM.
- GRADE OF STEEL- E350, CONFORMING TO SA/IS-2062.
- CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- ALL SITE CONNECTIONS SHALL BE OF BOLTED TYPE UNLESS SHOWN OTHERWISE.

REFERENCE DRAW/NGS :-

- MATREE-00-MA-LD-421100001PEM-C - PLOT PLAN
- MATREE-00-UTX-LA-100100-PEM-A - MPH- GEN. NOTES & STD. DETAILS FOR CIVIL WORKS
- MATREE-00-STA-DB-113201-PEM-3 --- LAYOUT OF WORKSHOP BUILDING

LEGENDS :-

T.O.S. - TOP OF CONCRETE
U.N.O. - UNLESS NOTED OTHERWISE
TYP. - TYPICAL
MC - MOMENT CONNECTION
F.F.L. - FINISHED FLOOR LEVEL

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)
THIS DRAWING MARKED/✓ IS RELEASED FOR
☐ COMMENTS/APPROVAL
☐ PLANNING/INFORMATION
☐ CONSTRUCTION

STAMP ALL PREVIOUS REVISION AS SUPERSEDED

ISSUED BY
NAME SACHIN PANDIT
SIGNATURE
DATE 22 November 2019

STRUCTURAL STEEL QUANTITY = 725 MT

(APPROX FOR SHEET 1 TO 5)

3	22.11.19	RAHUL	BA	SP	DRAWING REVISED & CHANGES MARKED AS 
2	13.09.19	RAHUL	BA	SP	DRAWING REVISED IN LINE WITH CUST. COMMENTS CHANGES MARKED AS 
	DATE	ALTERED	CHECKED	APPROVED	NOTE

PROJECT
2x660MW MATREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH
(EPC MAIN PLANT PACKAGE)

OWNER CONSULTANT:
FICHTNER
M/s FICHTNER GmbH
& Co KG,
Stuttgart, GERMANY

OWNER:
BANGLADESH-INDIA FRIENDSHIP POWER
COMPANY (PVT.) LIMITED, BANGLADESH

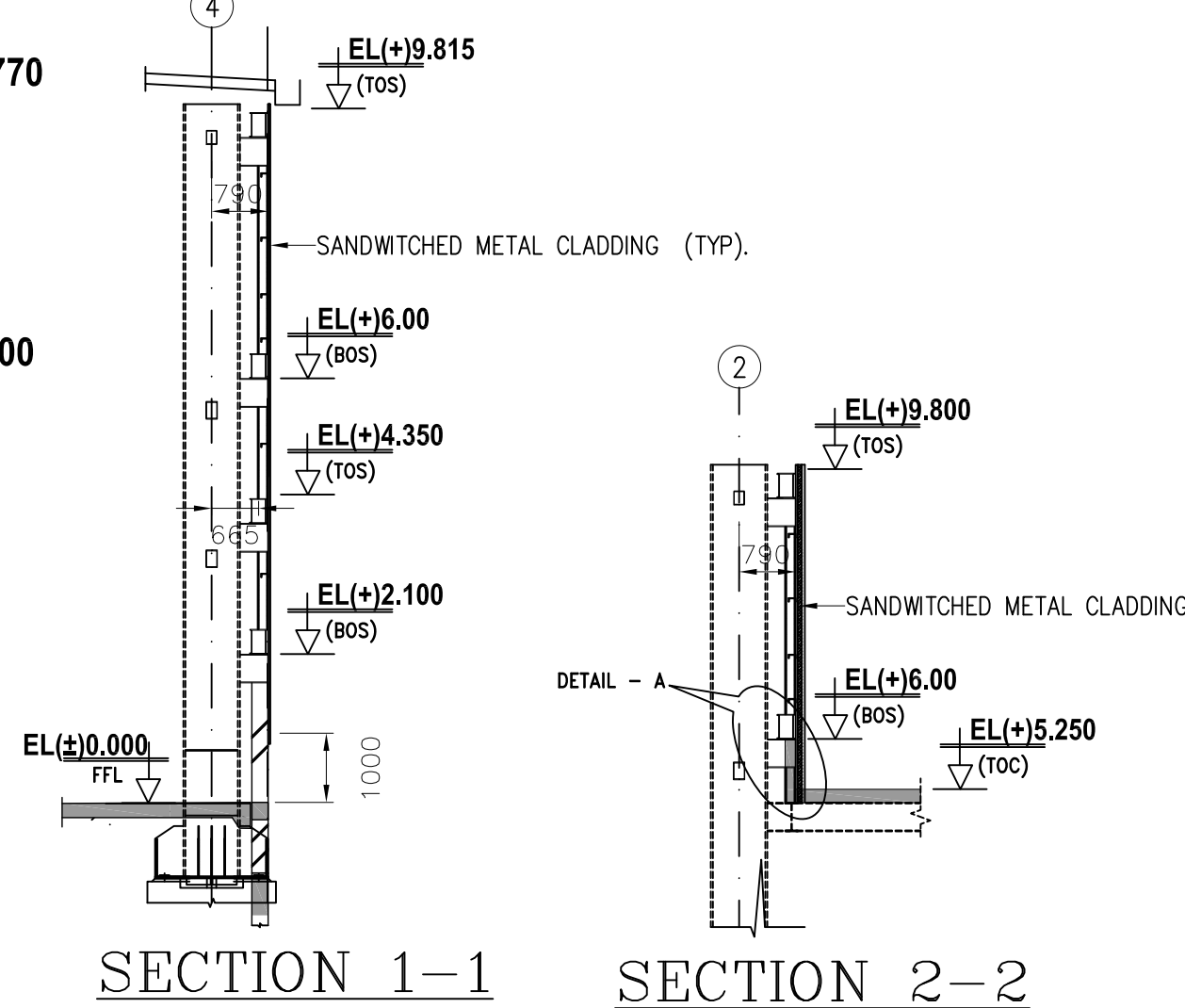
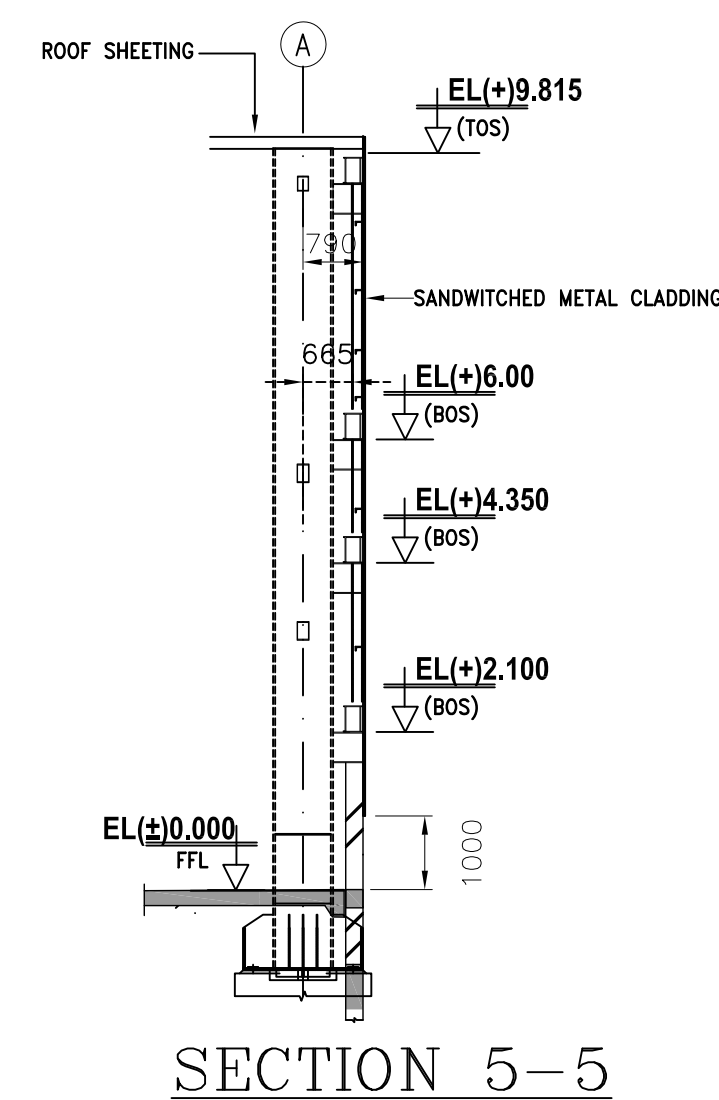
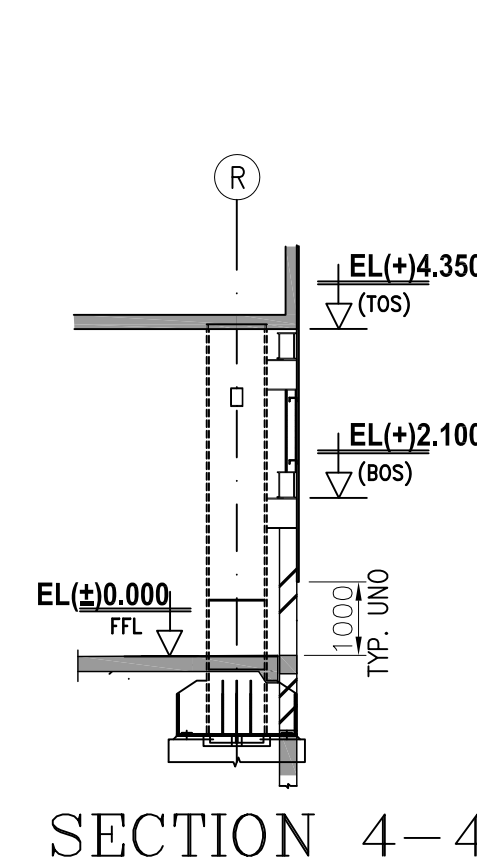
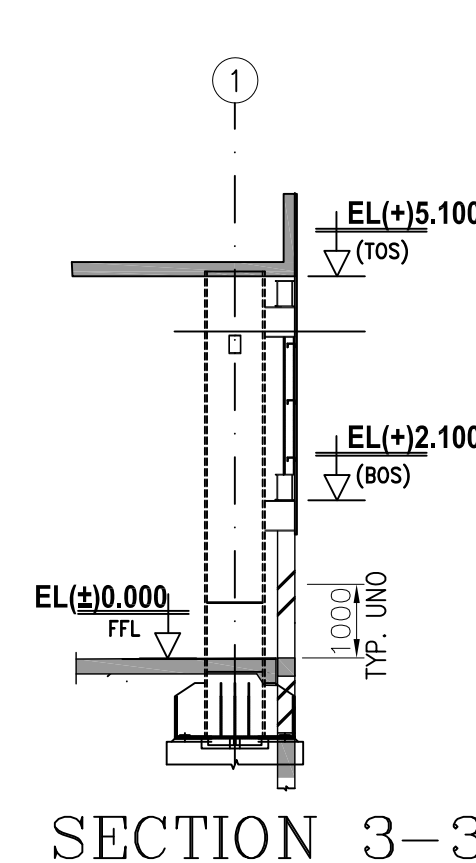
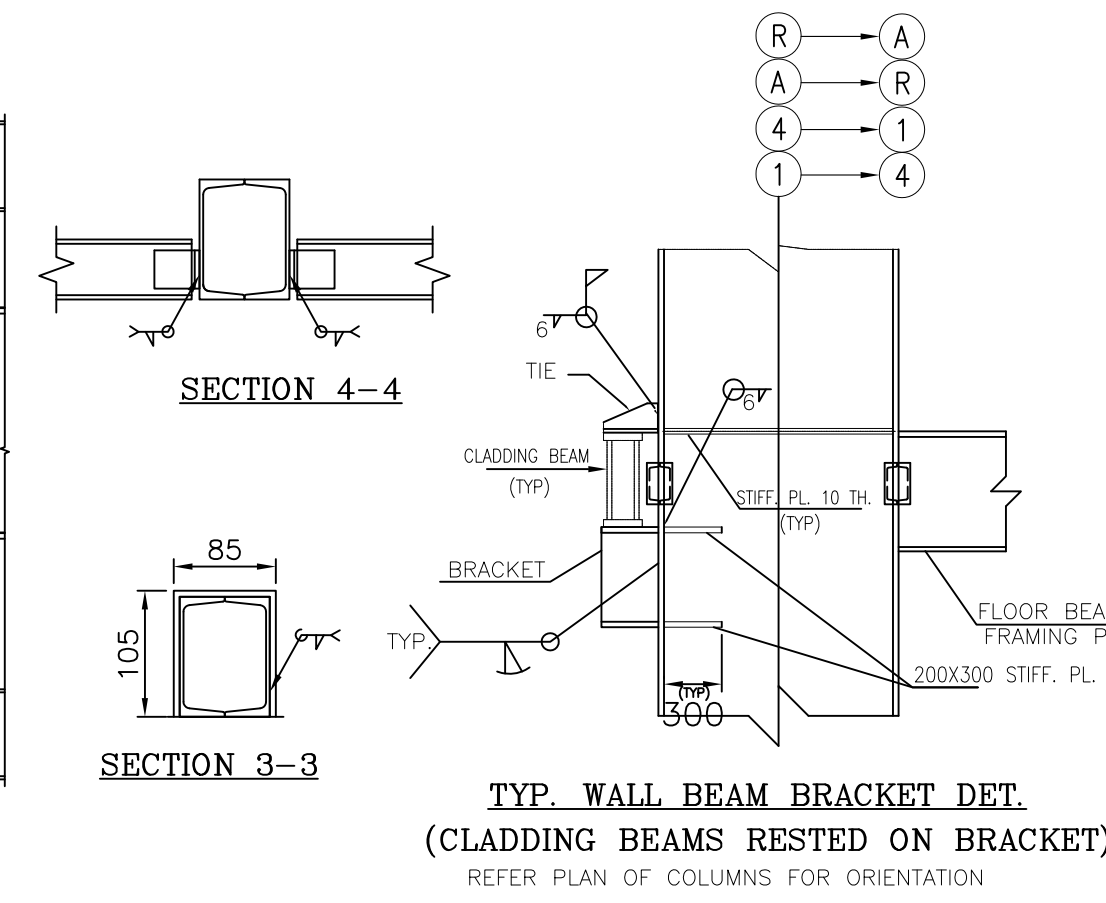
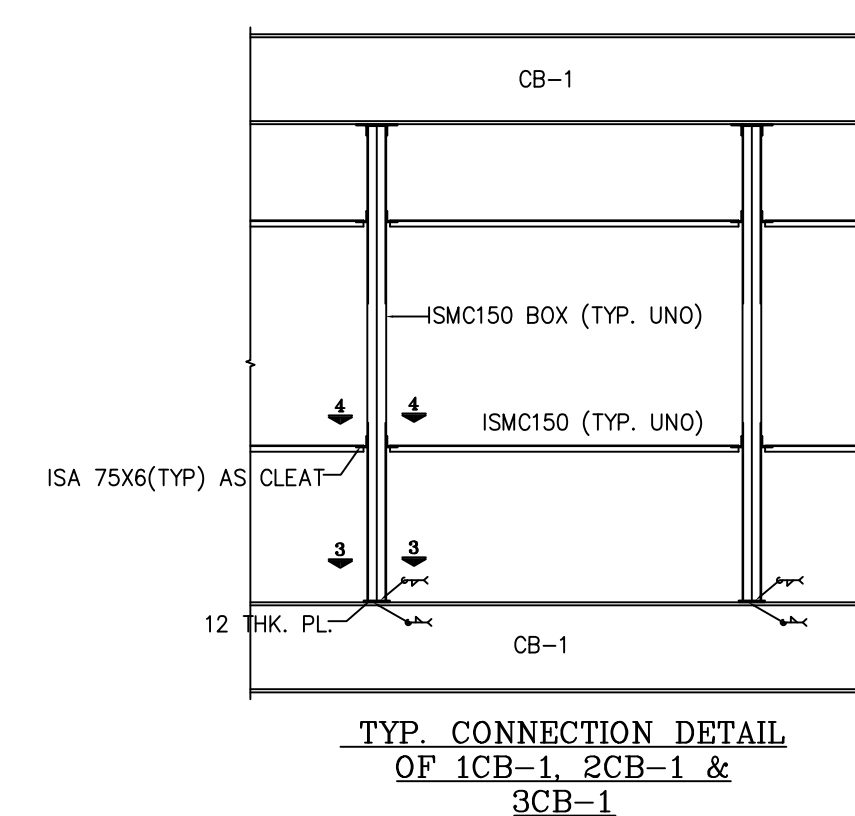
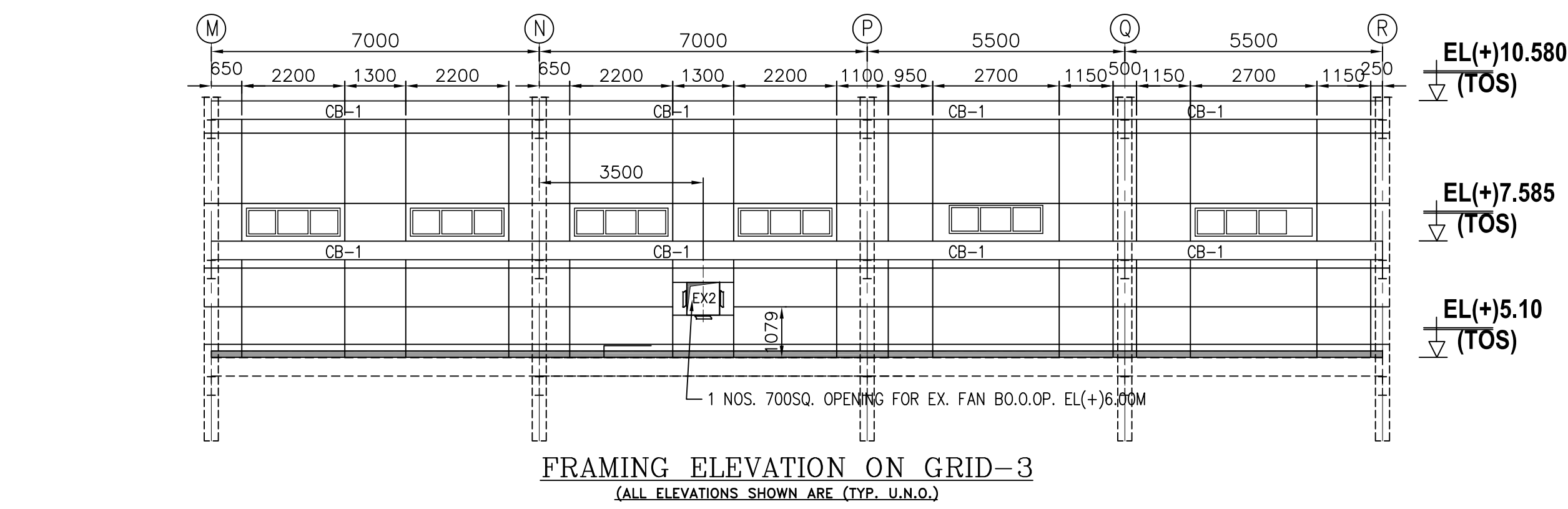
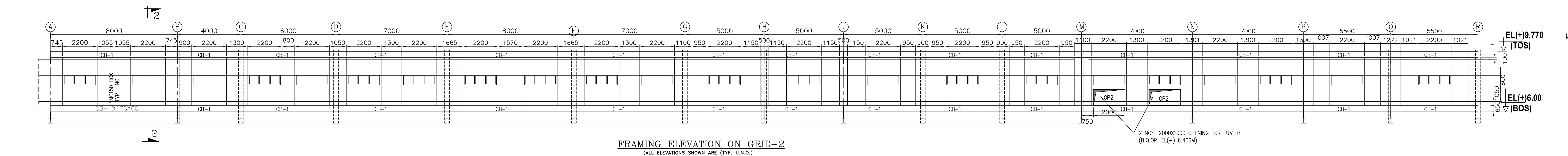
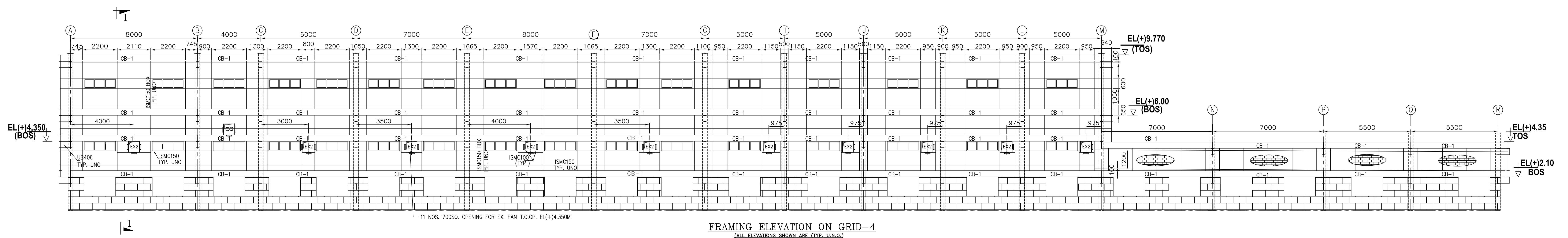
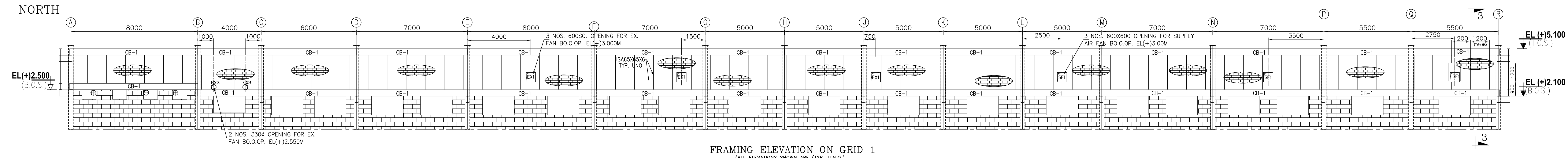
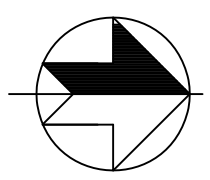
BHARAT HEAVY ELECTRICALS LTD
POWER SECTOR
PROJECTS ENGINEERING MANAGEMENT
NDA

SCALE:
SHEET
2 OF 7

CENTRAL WORKSHOP
DETAILS OF SUPER STRUCTURE

SUPERSEDED BY:
SYSTEM:

SIZE: NO
PROJECT NO.: 421
FILE:
ANNEX: DRAW/NG NO.: MATREE-00-IST-LB-100345-PEM
REV 3

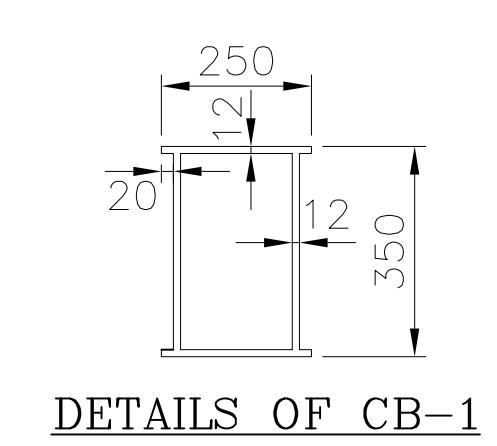
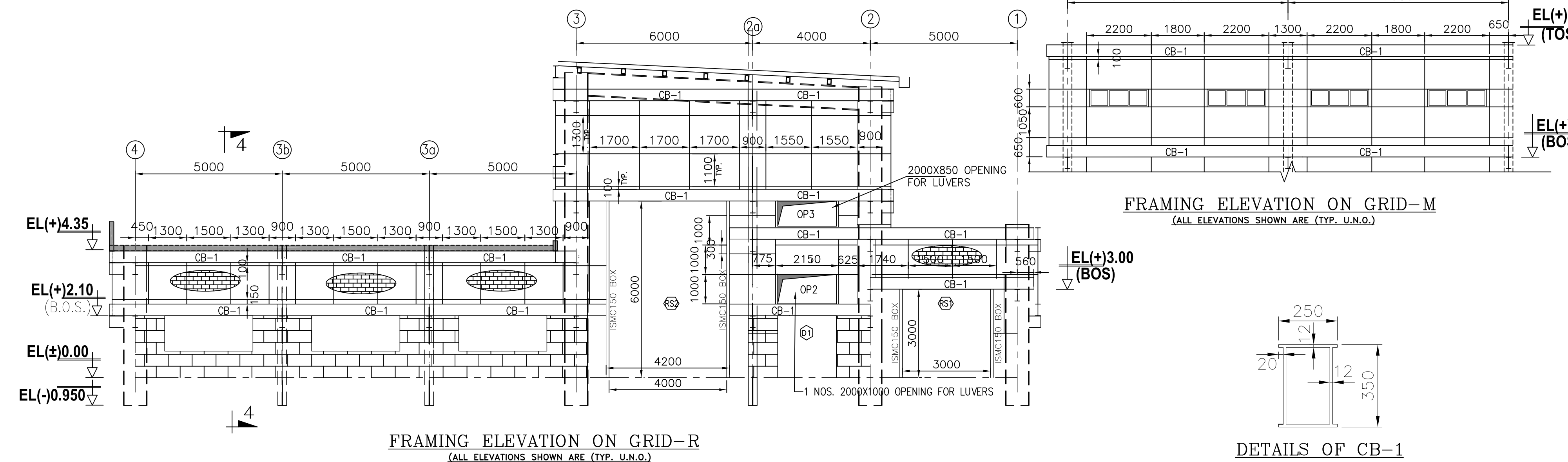
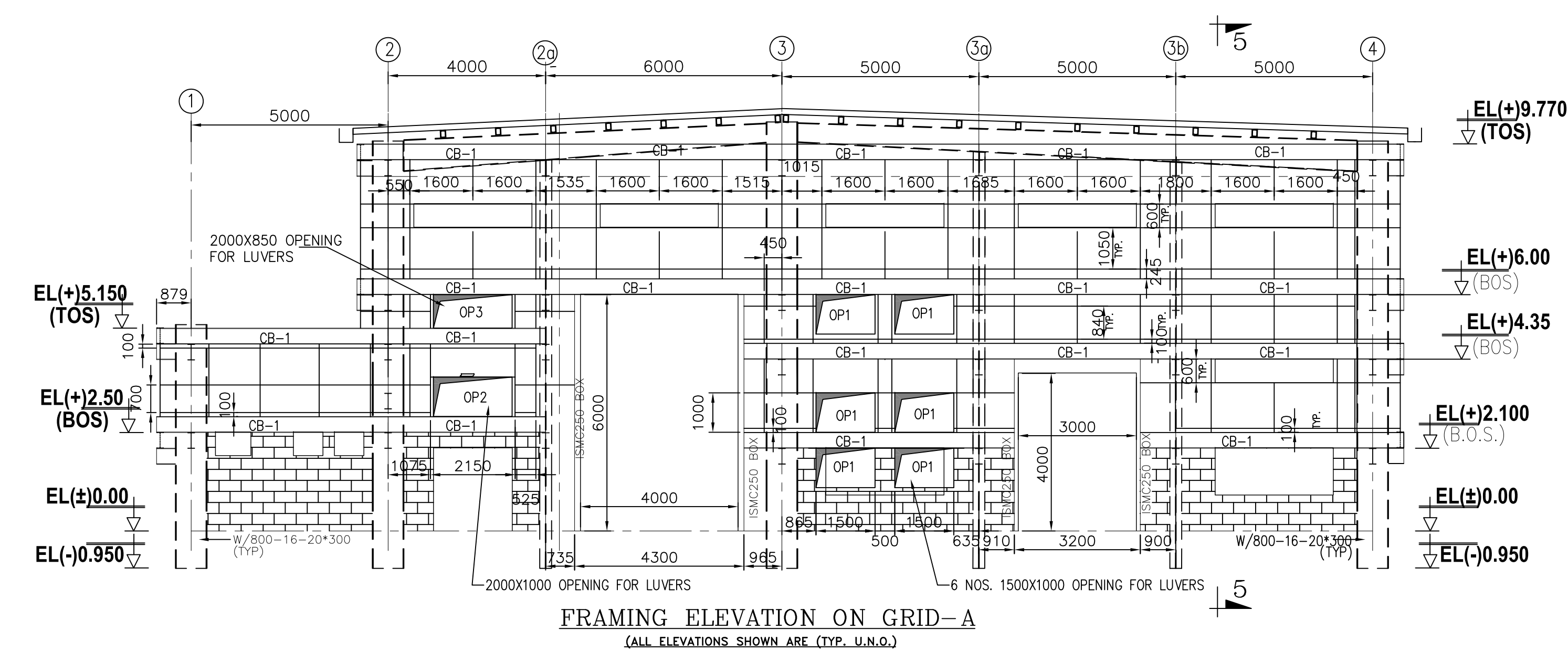


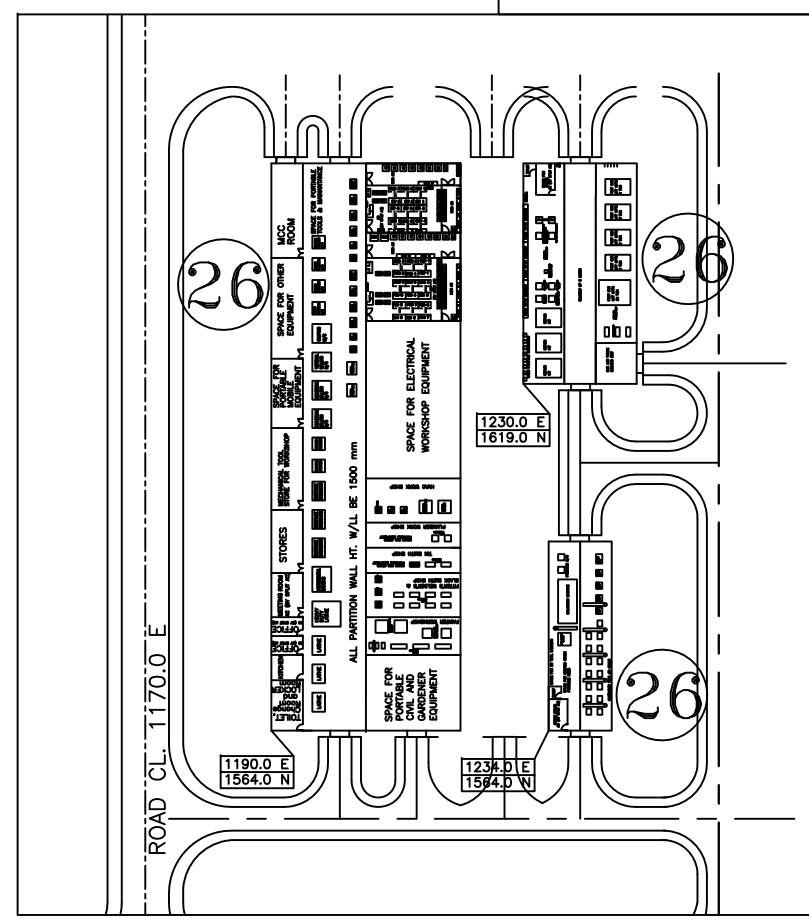
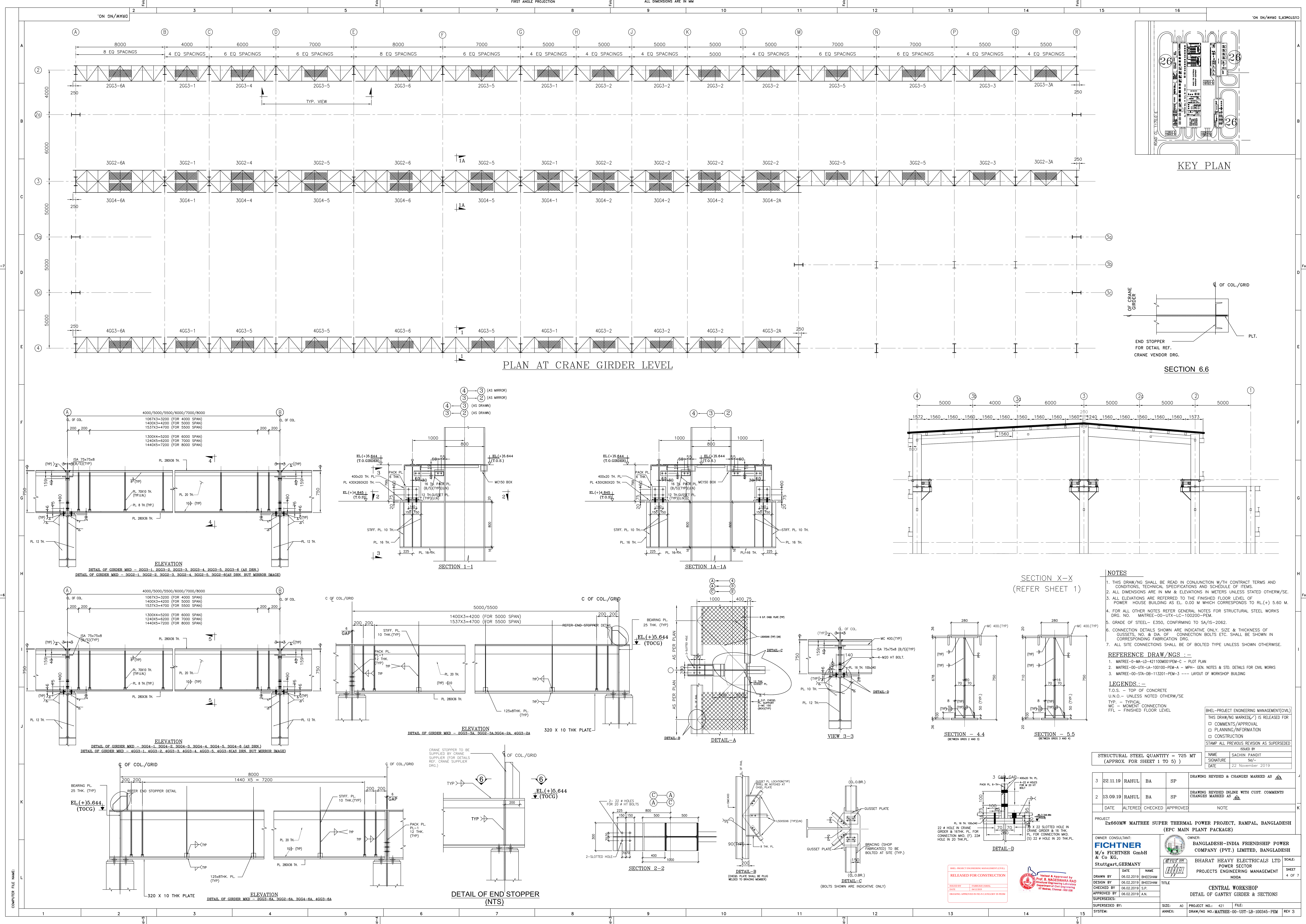
- ## NOTES

1. THIS DRAWING/NO. SHALL BE READ IN CONJUNCTION W/TH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
3. ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING.
4. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED TO RL(+/-) 5.60 M.
5. FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL FABRICATION. DRG. NO. MATREE-00-UTX-CL-100200-EM.
6. GRADE OF STEEL - E350, CONFORMING TO SAYS-2062.
7. CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING CONNECTION DETAIL.
8. ALL SITE CONNECTIONS SHALL BE OF BOLTED TYPE UNLESS SHOWN OTHERWISE.

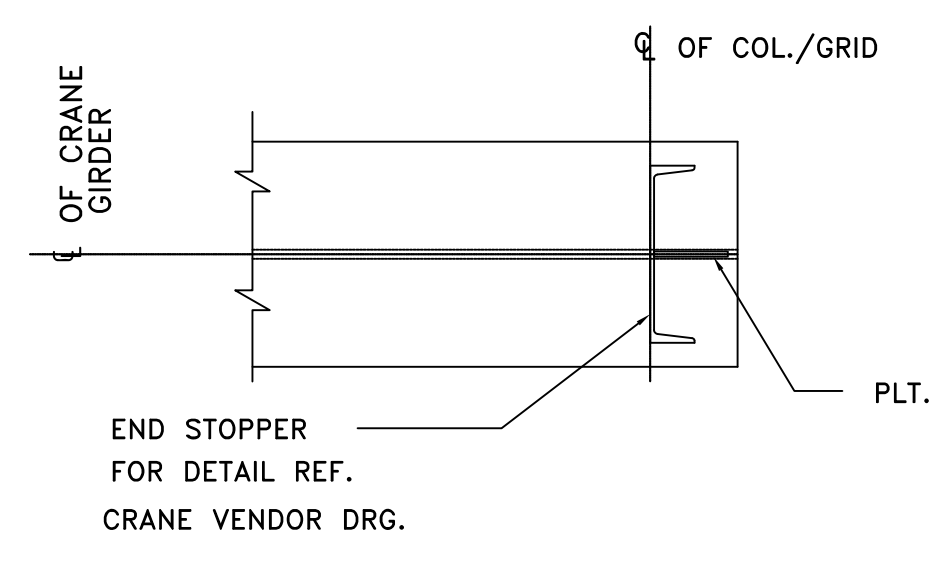
- REFERENCE DRAW/NGS :-
1. MAITREE-00-MA-LD-421100M001PEM-C - PLOT PLAN
 2. MAITREE-00-UTX-LA-100100-PEM-A - MPH- GEN. NOTES & STD. DETAILS FOR CIVIL WORKS
 3. MAITREE-00-STA-DB-113201-PEM-3 --- LAYOUT OF WORKSHOP BUILDING

- LEGENDS.: –**
T.O.S. – TOP OF CONCRETE
U.N.O.– UNLESS NOTED OTHERW/SE
TYP. – TYPICAL
MC – MOMENT CONNECTION
FFL – FINISHED FLOOR LEVEL





KEY PLAN



SECTION 6.6

- NOTES**
- THIS DRAW/NG SHALL BE READ IN CONJUNCTION W/TH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
 - ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO EL. (+) 5.60 M.
 - FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MATREE-00-UTX-LC-100200-PEM.
 - GRADE OF STEEL - E350, CONFIRMING TO SA/S-2062.
 - CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
 - ALL SITE CONNECTIONS SHALL BE OF BOLTED TYPE UNLESS SHOWN OTHERWISE.

- REFERENCE DRAW/NGS :-**
- MATREE-00-MA-LD-421100M01-PEM-C - PLOT PLAN
 - MATREE-00-UTX-LA-100100-PEM-A - MPH+ GEN. NOTES & STD. DETAILS FOR CIVIL WORKS
 - MATREE-00-STA-DB-113201-PEM-3 - LAYOUT OF WORKSHOP BUILDING
- LEGENDS :-**
- T.O.S. - TOP OF CONCRETE
 - U.N.O. - UNLESS NOTED OTHERWISE
 - TYP. - TYPICAL
 - MC - MOMENT CONNECTION
 - F.F.L. - FINISHED FLOOR LEVEL

STAMP ALL PREVIOUS REVISION AS SUPERSEDED			
THIS DRAWING MARKED (✓) IS RELEASED FOR			
COMMENTS/REVISIONS			
PLANNING/INFORMATION			
CONSTRUCTION			
DATE			
22 November 2019			
SIGNATURE			
SACHIN PANDIT			
NAME			
SACHIN PANDIT			
DATE			
22 November 2019			

3	22.11.19	RAHUL	BA	SP	DRAWING REVISED & CHANGES MARKED AS
2	13.09.19	RAHUL	BA	SP	DRAWING REVISED ONLINE WITH CUST. COMMENTS
DATE	ALTERED	CHECKED	APPROVED	NOTE	

PROJECT
2x660MW MATREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH
(EPC MAIN PLANT PACKAGE)

OWNER CONSULTANT:
FICHTNER
M/s FICHTNER GmbH
& Co KG,
Stuttgart, GERMANY

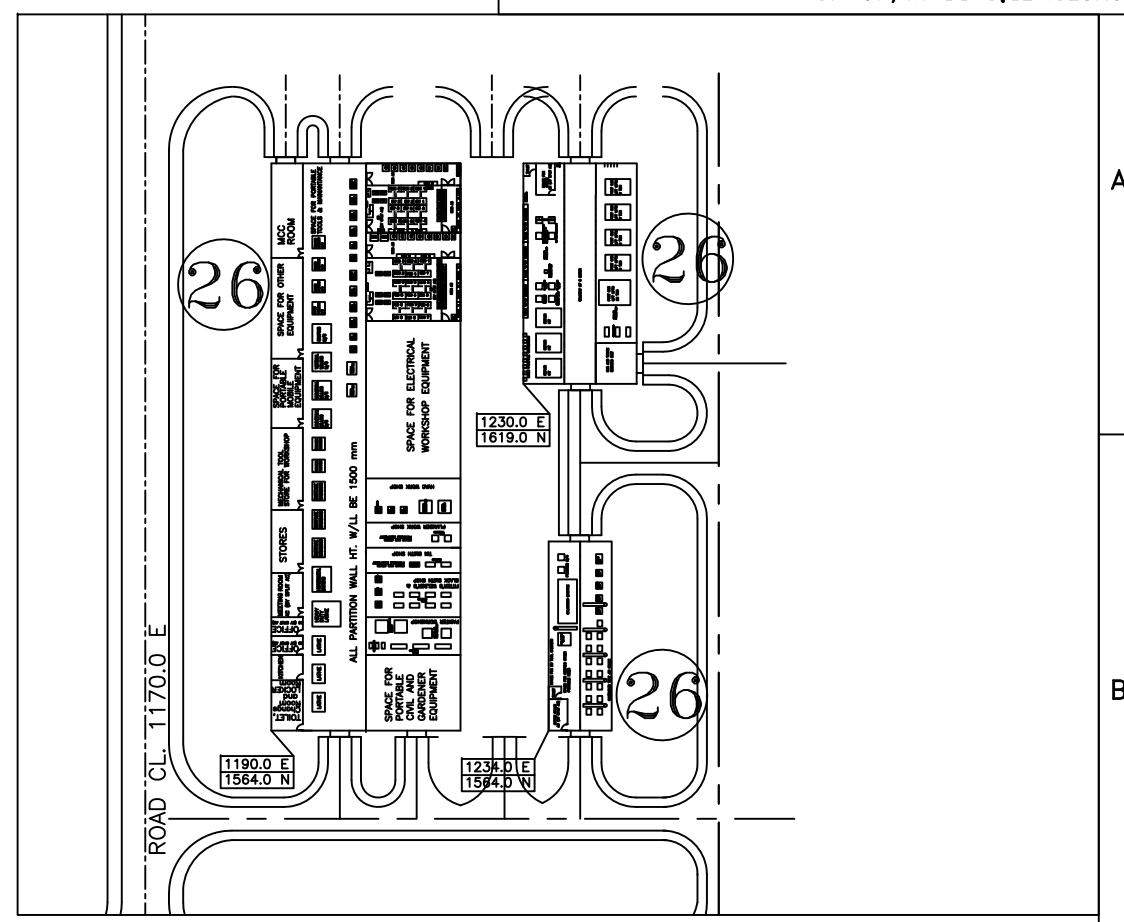
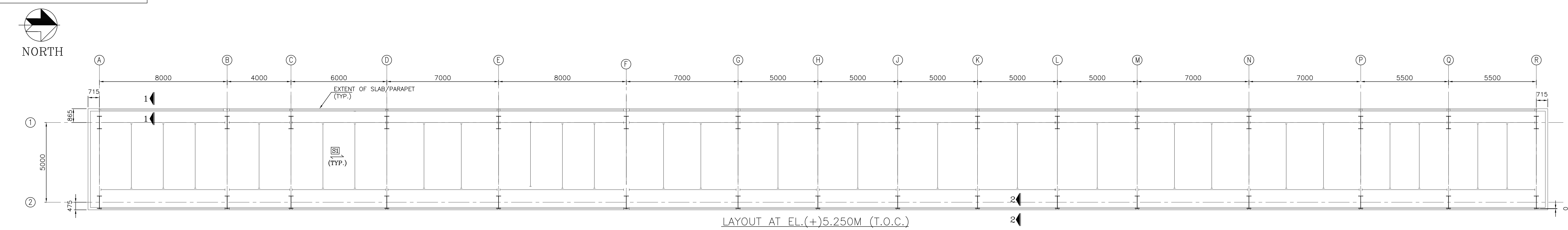
OWNER:
BANGLADESH-INDIA FRIENDSHIP POWER
COMPANY (PVT.) LIMITED, BANGLADESH

DESIGNER:
BHARAT HEAVY ELECTRICALS LTD
POWER SECTOR
PROJECTS ENGINEERING MANAGEMENT
Noida

CENTRAL WORKSHOP
DETAIL OF GANTRY GIRDER & SECTIONS

DESIGNED BY: DATE: 06.02.2019
CHECKED BY: DATE: 06.02.2019
APPROVED BY: DATE: 06.02.2019
SUPERSEDED BY: DATE: 06.02.2019

PROJECT NO.: 421
FILE:
DRAWING NO.: MATREE-00-UTX-LB-100345-PEM
REV 3



KEY PLAN

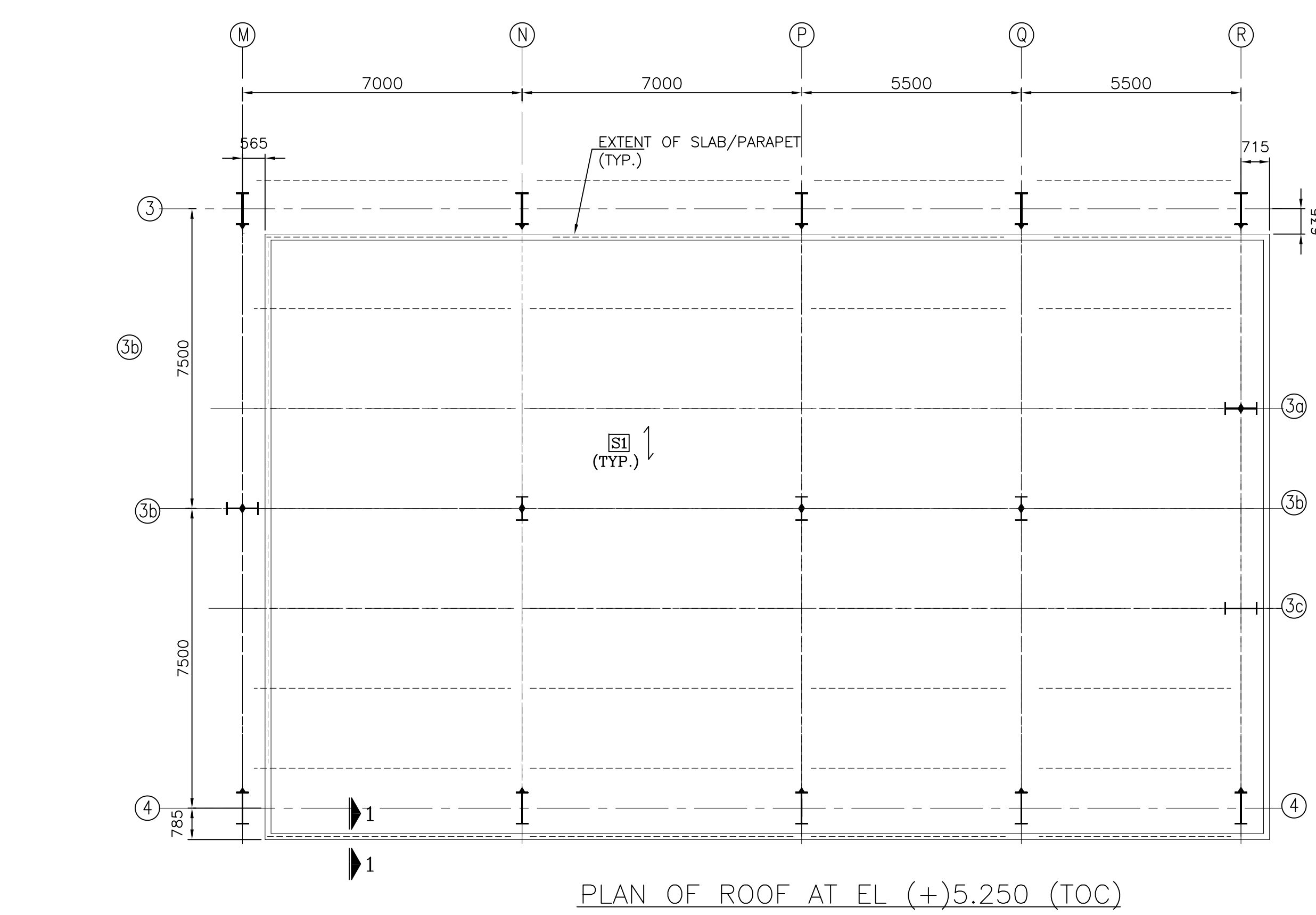
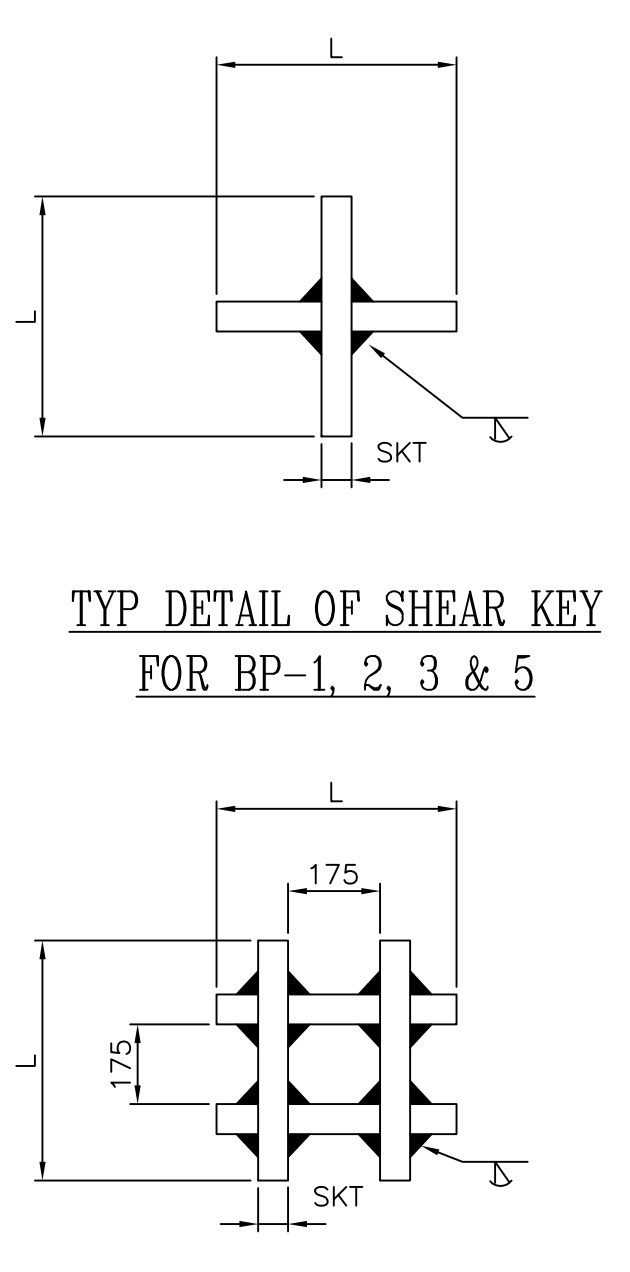
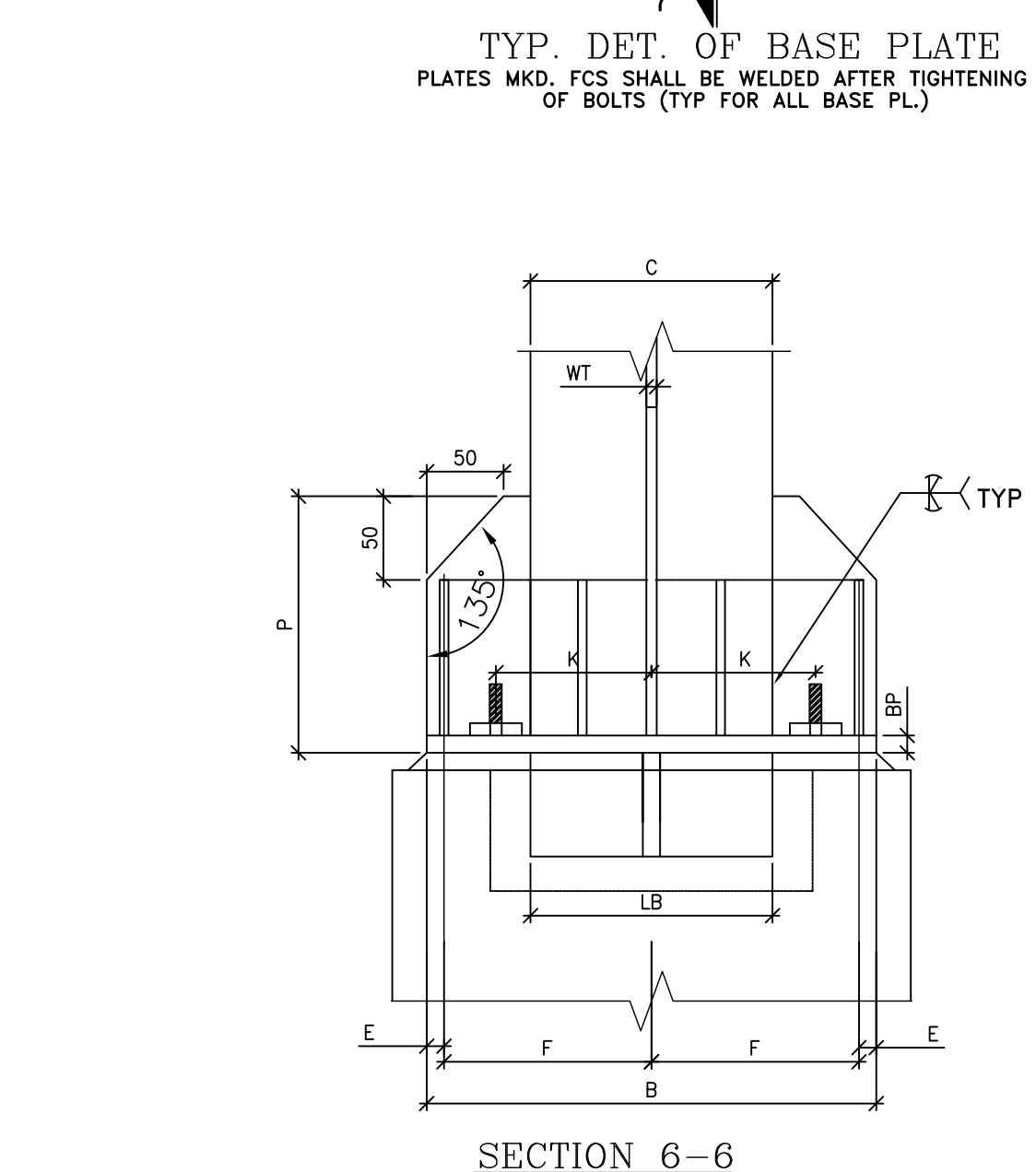
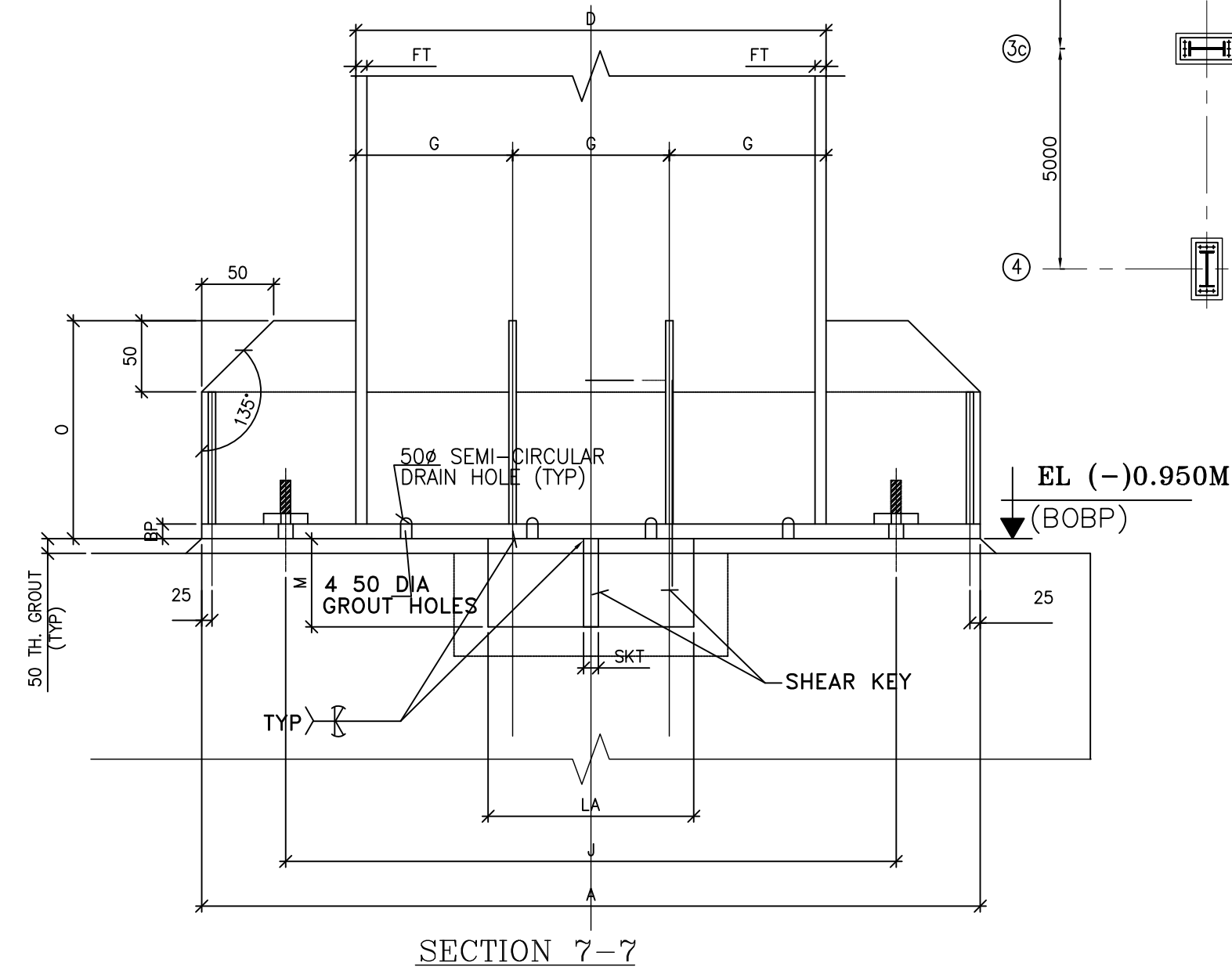
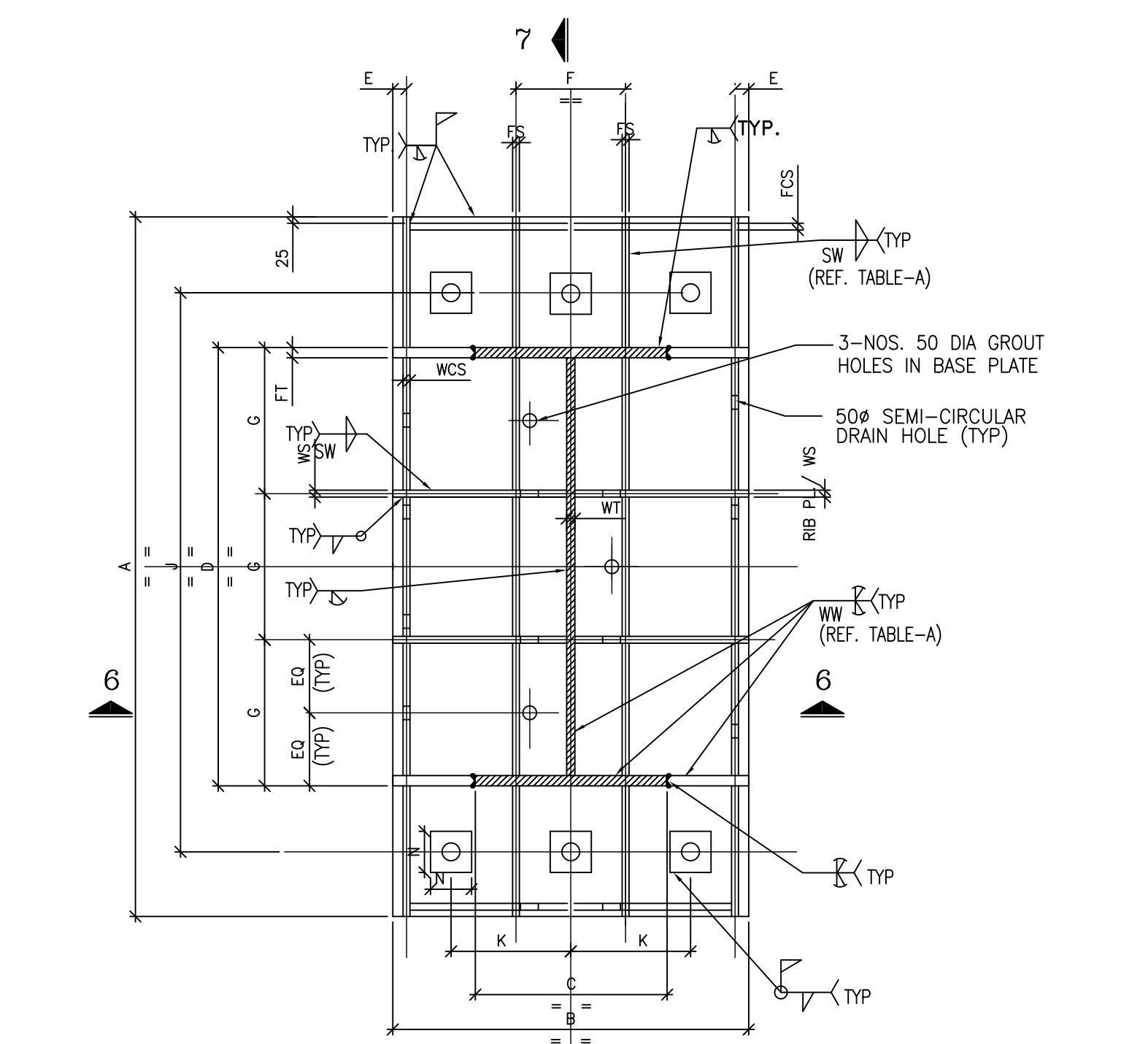
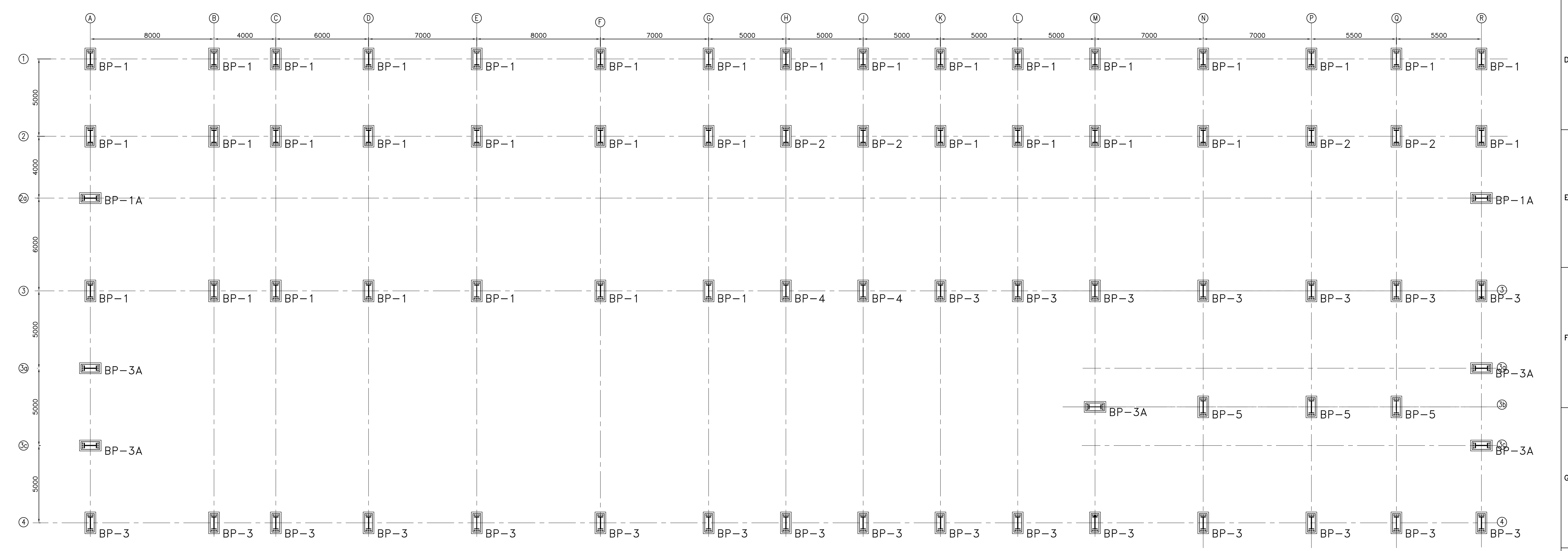


TABLE 4 - SCHEDULE OF SLAB REINFORCEMENT

SLAB MKD. AS	REINFORCEMENT	
	SHORTER SPAN	LONGER SPAN
SI	10-200Y (T/B)	10-200Y (T/B)



TYP. DETAIL OF SHEAR KEY FOR BP-4

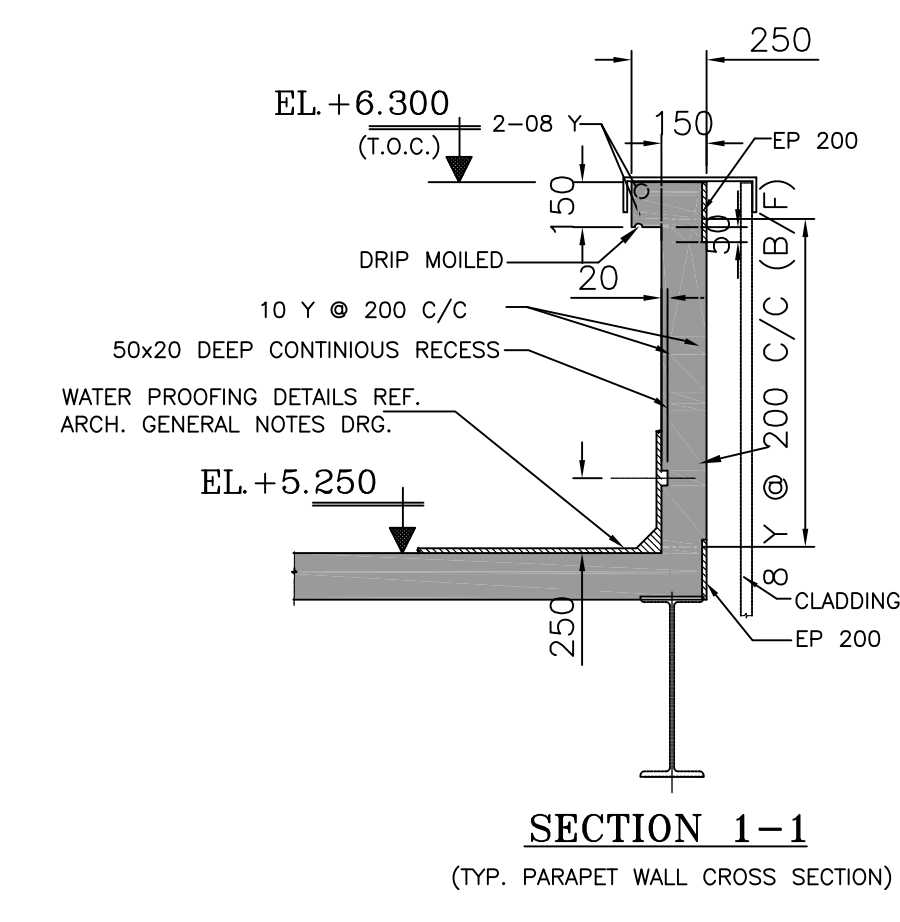
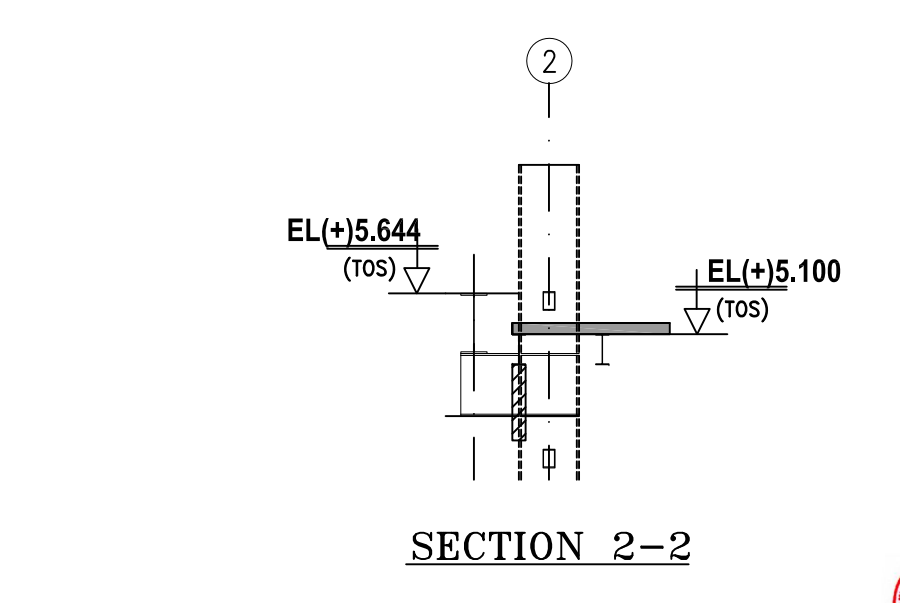
BASE PL. SCHEDULE

GROUP MKD.	BP-1/1A	BP-2	BP-3/3A	BP-4	BP-5	REMARKS
COL. MKD.	A1, B1, C1, D1, E1, F1, G1, H1, I1, J1, K1, L1, M1, N1, O1, P1, Q1, R1, S1, T1, U1, V1, W1, X1, Y1, Z1	H2, J2, P2, Q2	K3, L3, M3, N3, O3, P3, Q3, R3, S3, T3, U3, V3, W3, X3, Y3, Z3	H3, J3	N3O, P3N, Q3O	
ITEM MKD.						
BP	32	32	32	40	25	BASE PL. W/TH 4 NOS. GROUT PIPES AND 4 BOLT HOLE
NO. OF BOLT	6	6	6	6	6	TOTAL NUMBER AND DIA OF BOLT
DIA OF BOLT	50	50	50	50	50	
FT	SAME AS COL. FL. PL. THICKNESS					PL. BUTT WELDED TO COL. FL. PL.
WT	REFER COLUMN SECTION					COL. WEB PL.
FS	10	10	10	10	10	FL. STIFF. PL.
WS	10	10	10	10	10	WEB STIFF. PL.
WP	40	40	40	40	40	WASHER PL. W/TH 1-4 BOLT HOLE
FCS	10	10	10	10	10	FL. CROSS STIFF. PL.
WCS	10	10	10	10	10	WEB CROSS STIFF. PL.
SKT	32	32	32	40	20	SHEAR KEY
-	-	-	-	-	-	

* # HOLES = DIA. OF BOLT + 15 MM
** # HOLES = DIA. OF BOLT + 3 MM

BASE PL. SCHEDULE

DIM MKD.	BP-1	BP-2	BP-3	BP-4	BP-5	REMARKS
A	1200	1200	1200	1200	1000	BASE PLATE DIMENSIONS
B	500	500	700	700	500	
C	REFER COLUMN SCHEDULE					
D	25	25	25	25	25	
E	150	150	150	150	150	
F	200	200	200	200	200	
G	200	200	200	200	200	
J	1000	1000	1000	1000	800	C/C OF BOLT
K	150	150	150	150	150	C/C OF BOLT
L	300	500	300	500	300	SHEAR KEY
M	150	150	150	150	150	
N	120	120	120	120	120	WASHER PLATE
O	300	300	300	300	300	HT. OF FLANGE STIFF. PL.
P	300	300	300	300	300	HT. OF WEB STIFF. PL.



- NOTES
- THIS DRAW/NG SHALL BE READ IN CONJUNCTION W/TH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
 - ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL.(+) 5.60 M.
 - FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MAITREE-00-UTX-LC-100200-PEM.
 - GRADE OF STEEL - E350, CONFORMING TO SA/IS-2062.
 - CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
 - ALL SITE CONNECTIONS SHALL BE OF BOLTED TYPE UNLESS SHOWN OTHERWISE.
- REFERENCE DRAW/NGS :-
- MAITREE-0-MA-LD-421100M01PEM-C - PLOT PLAN
 - MAITREE-00-UTX-LA-100100-PEM-A - MPH- GEN. NOTES & STD. DETAILS FOR CIVIL WORKS
 - MAITREE-00-STA-DB-113201-PEM-3 - LAYOUT OF WORKSHOP BUILDING
- LEGENDS :-
- T.O.S. - TOP OF CONCRETE
U.N.O. - UNLESS NOTED OTHERWISE
TYP. - TYPICAL
MC - MOMENT CONNECTION
FFL - FINISHED FLOOR LEVEL

RELEASED FOR CONSTRUCTION

ISSUED BY: CHANDRAN JARAL
DATE: 06/11/2019
DRAWING APPROVED BY: CHANDRAN JARAL

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
THIS DRAWING MARKED (✓) IS RELEASED FOR
COMMENTS/APPROVAL
PLANNING/INFORMATION
CONSTRUCTION

STAMP ALL PREVIOUS REVISION AS SUPERSEDED

ISSUED BY: SACHIN PANDIT
SIGNATURE: SACHIN PANDIT
DATE: 22 November 2019

STRUCTURAL STEEL QUANTITY = 725 MT (APPROX FOR SHEET 1 TO 5)

3 22.11.19 RAHUL BA SP DRAWING REVISED & CHANGES MARKED AS

13.09.19 RAHUL BA SP DRAWING REVISED IN LINE WITH CUST. COMMENTS CHANGES MARKED AS

DATE ALTERED CHECKED APPROVED NOTE

PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)

OWNER CONSULTANT: FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart, GERMANY

OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH

OWNER: BHARAT HEAVY ELECTRICALS LTD, POWER SECTOR, PROJECTS ENGINEERING MANAGEMENT, NOIDA

DRAWN BY: DATE: 06.02.2019 BY: BHEESHAM

DESIGN BY: DATE: 06.02.2019 BY: BHEESHAM

CHECKED BY: DATE: 06.02.2019 BY: A.N.

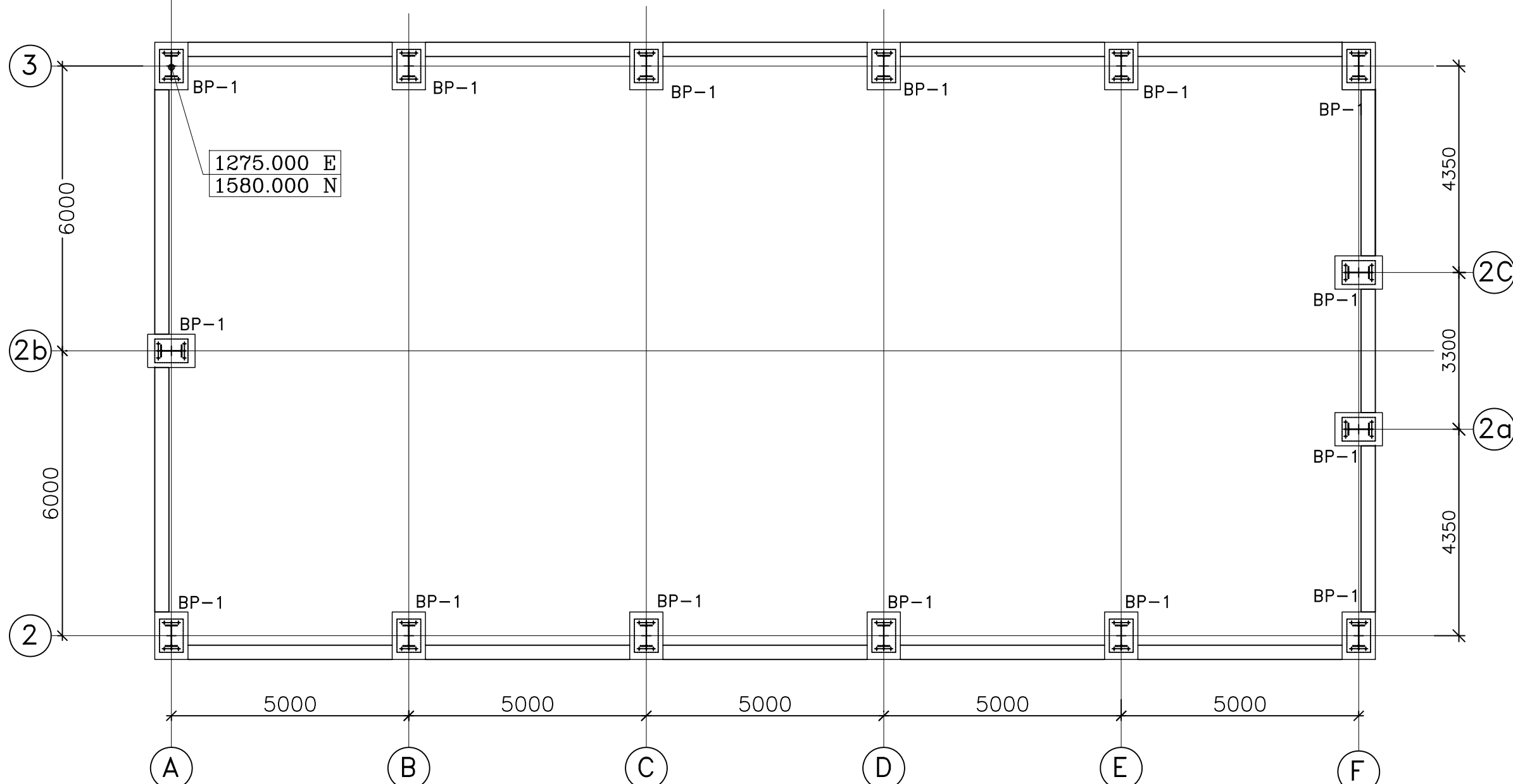
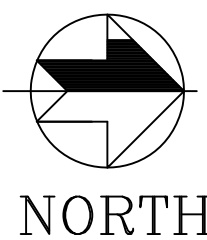
APPROVED BY: DATE: 06.02.2019 BY: A.N.

SUPERSEDED BY: DATE: 06.02.2019 BY: A.N.

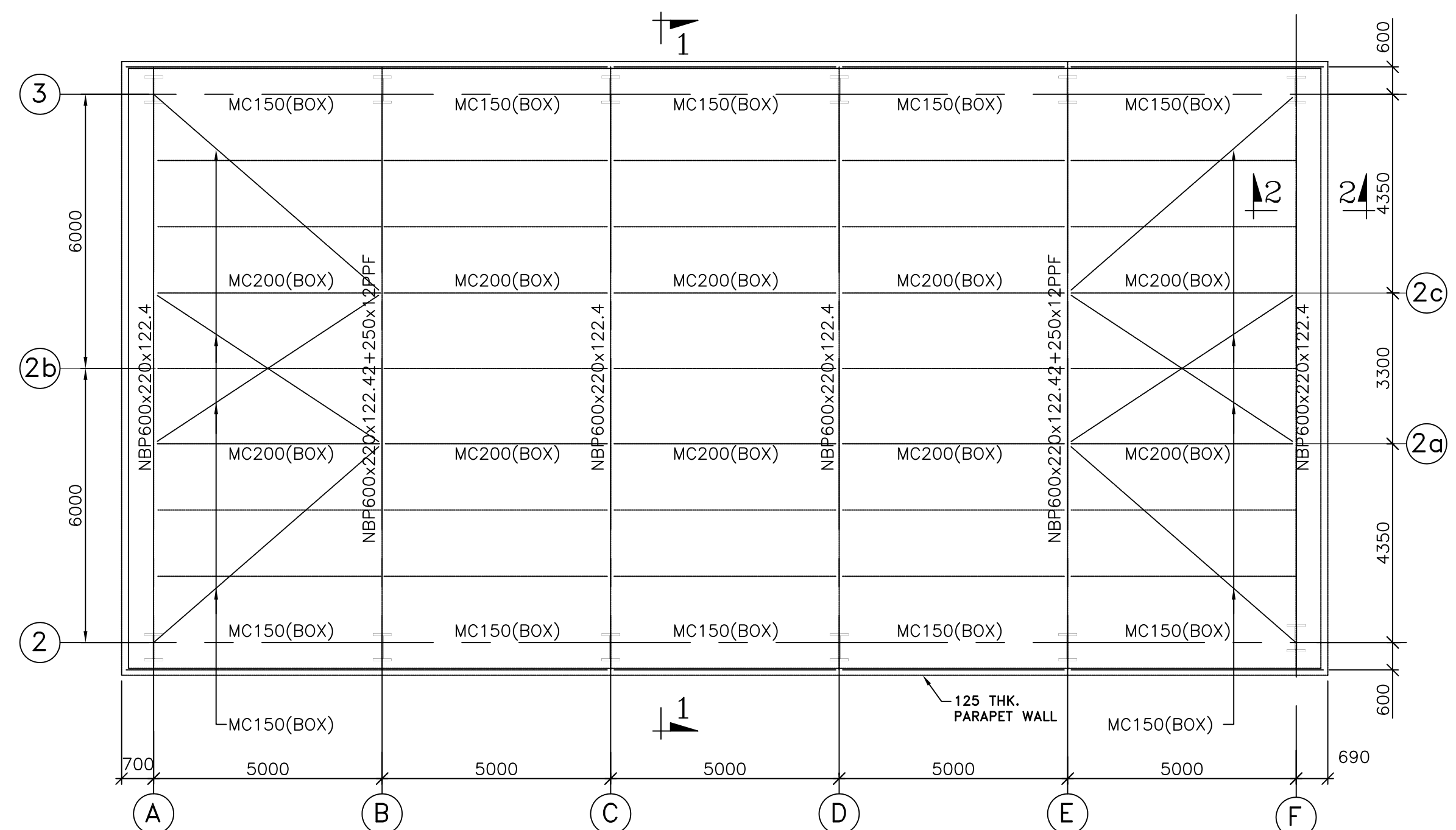
SYSTEM: SIZE: A0 PROJECT NO.: 421 FILE: DRAW/NG NO.: MAITREE-00-UTX-LB-100345-PEM REV 3

CENTRAL WORKSHOP
DETAIL OF BASE PLATE & R.C. DETAILS

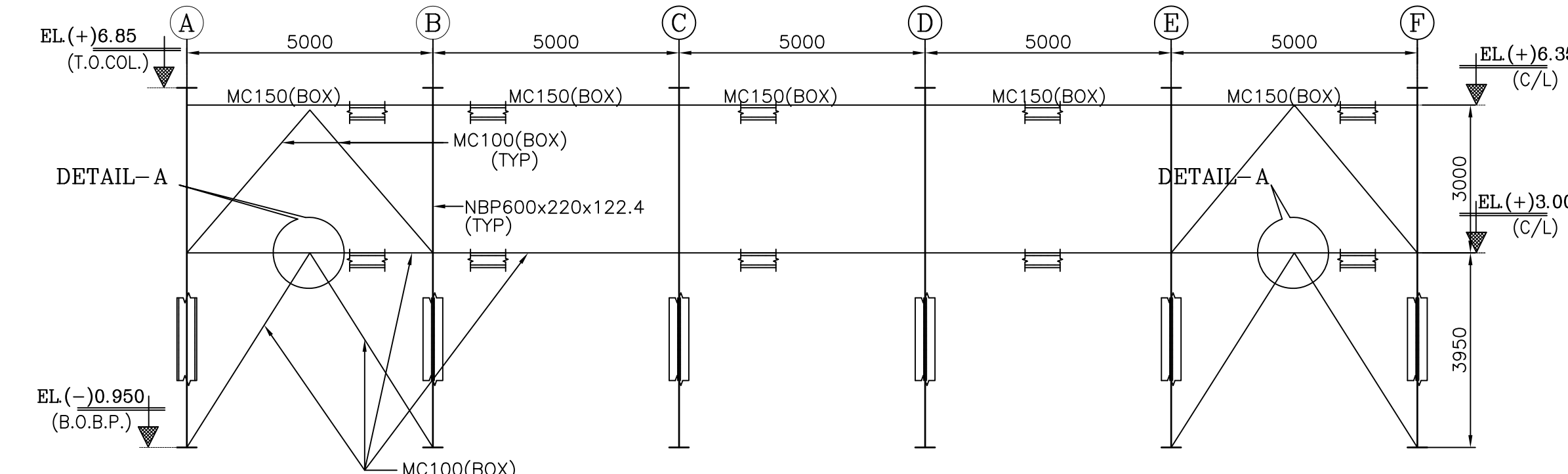
SHEET 5 OF 7



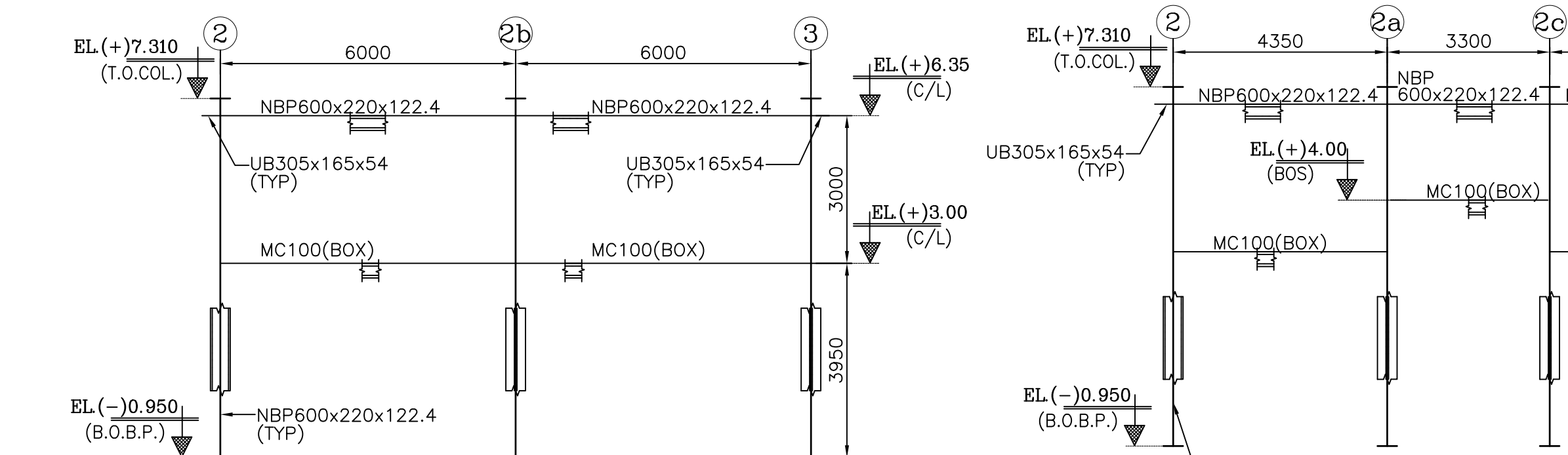
BASE PLATE PLAN AT EL (-)0.950M



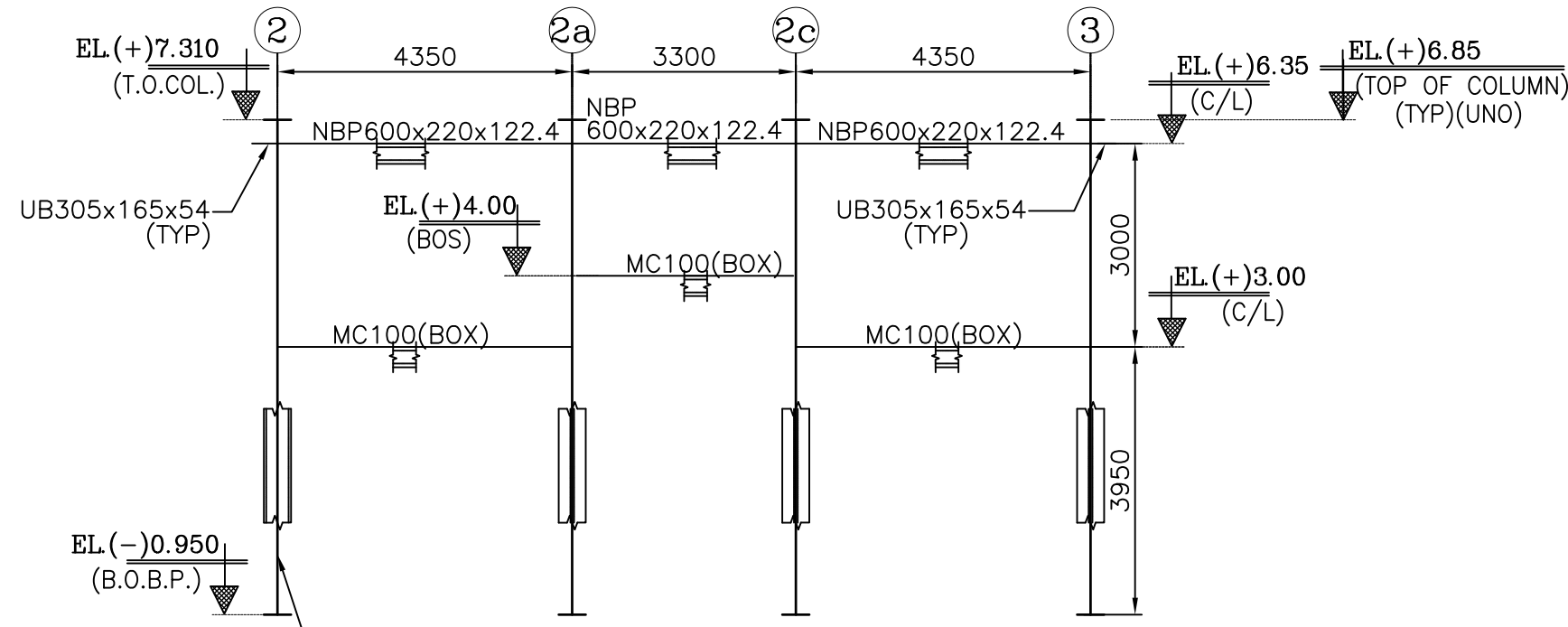
PLAN OF ROOF BRACINGS
AT C.L. OF ROOF GIRDER EL(+)6.35



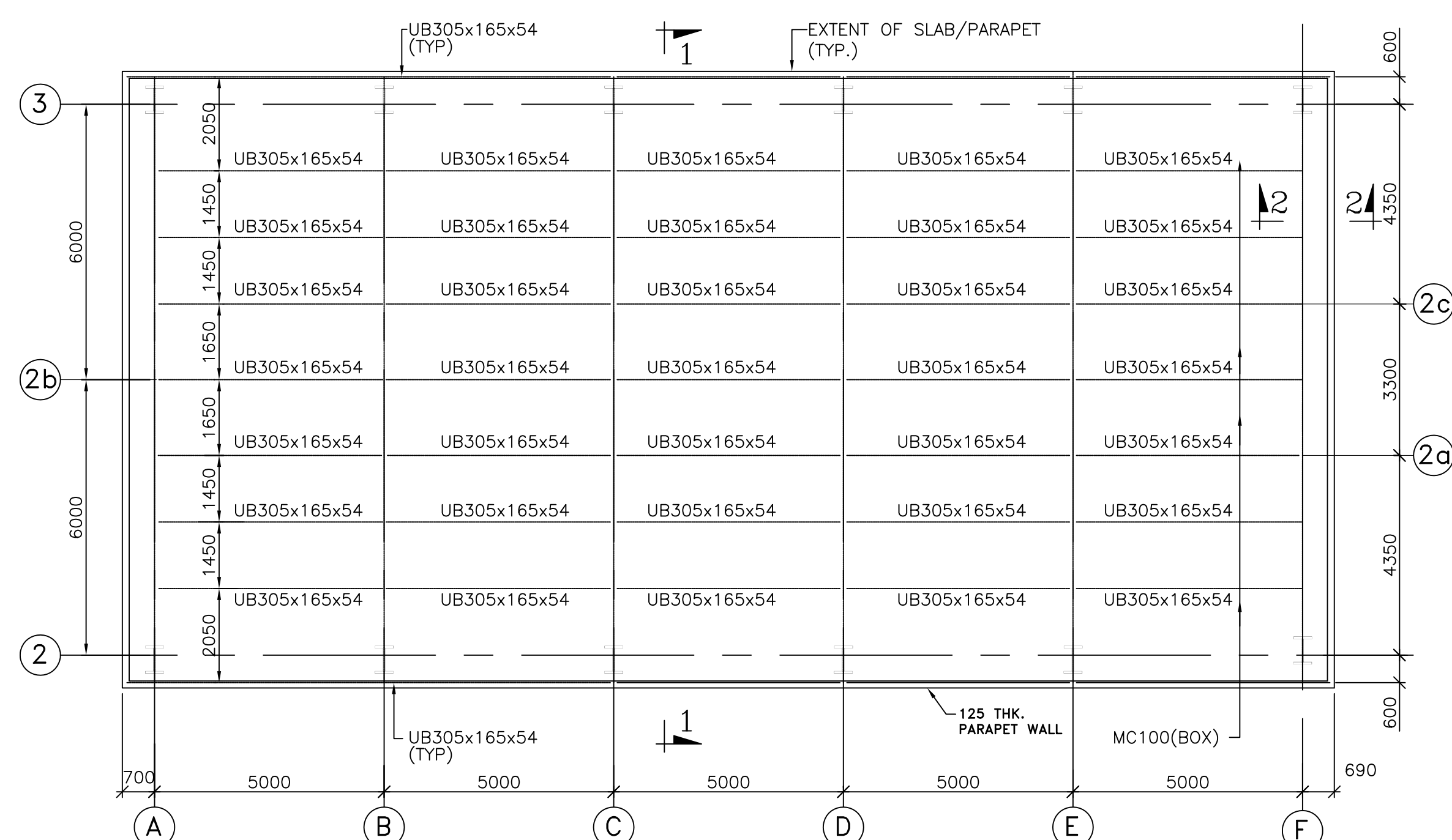
ELEVATION ALONG GRID-1&2



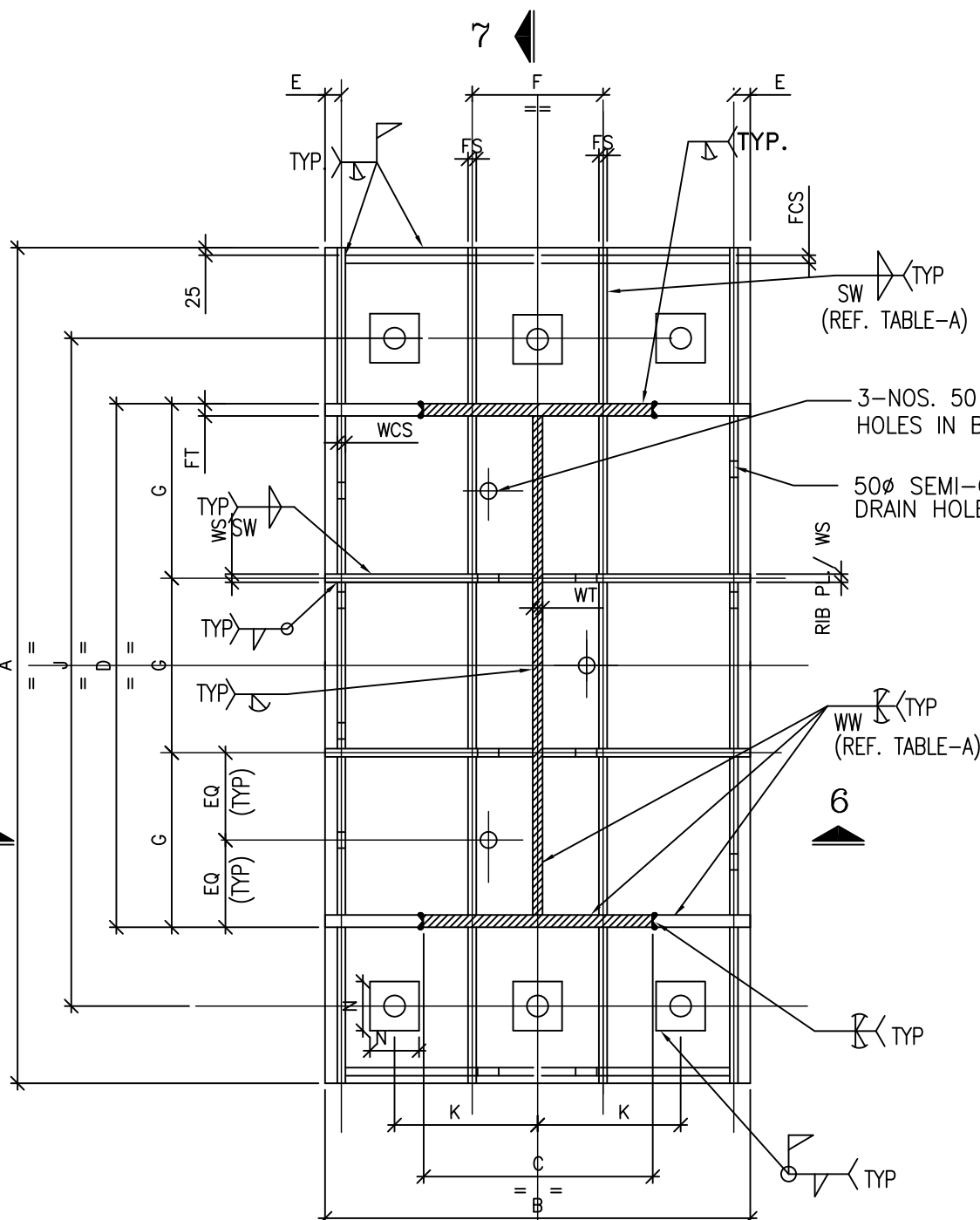
ELEVATION ALONG GRID-A



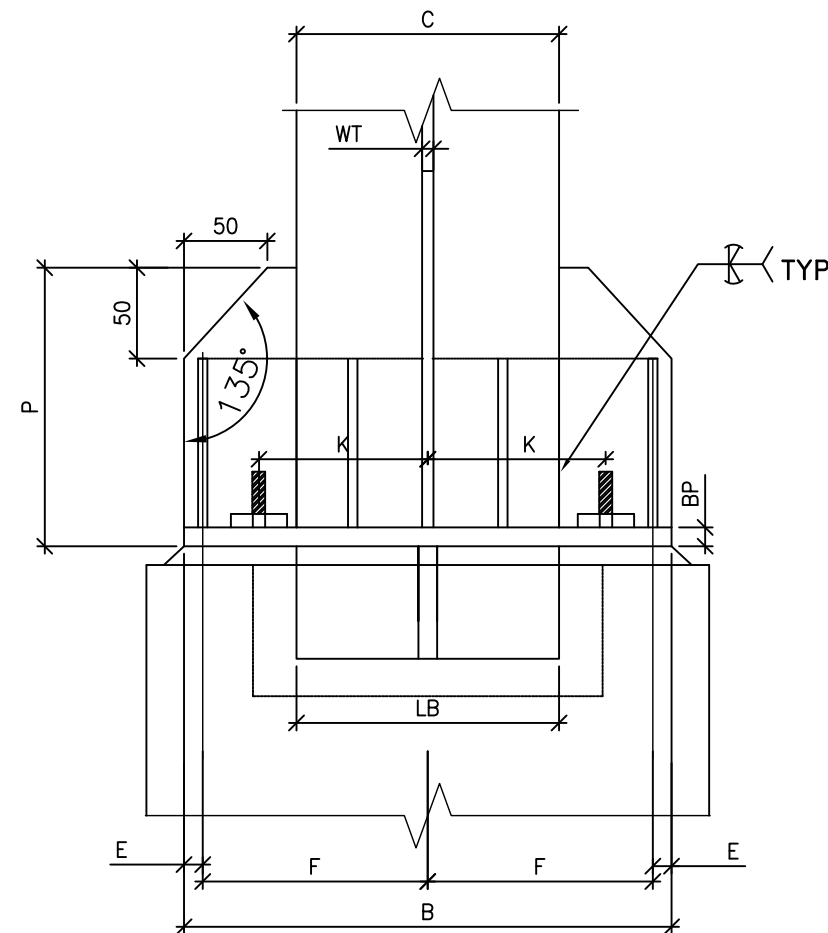
ELEVATION ALONG GRID-F



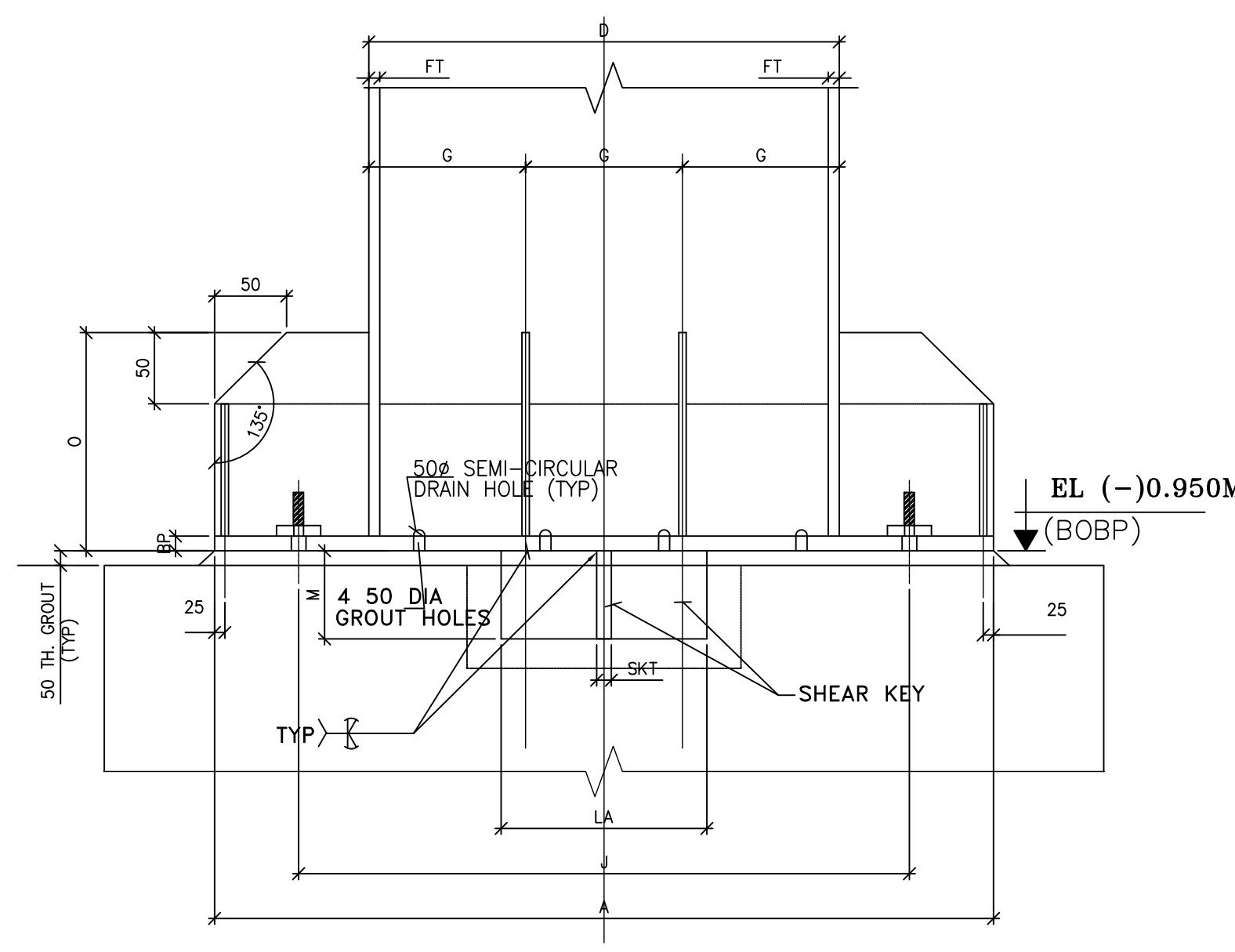
PLAN OF PURLINS
BOS(+)6.700



TYP. DET. OF BASE PLATE MKD. BP-1
PLATES MKD. FCS SHALL BE WELDED AFTER TIGHTENING
OF BOLTS (TYP FOR ALL BASE PL.)



SECTION 6-6



SECTION 7-7

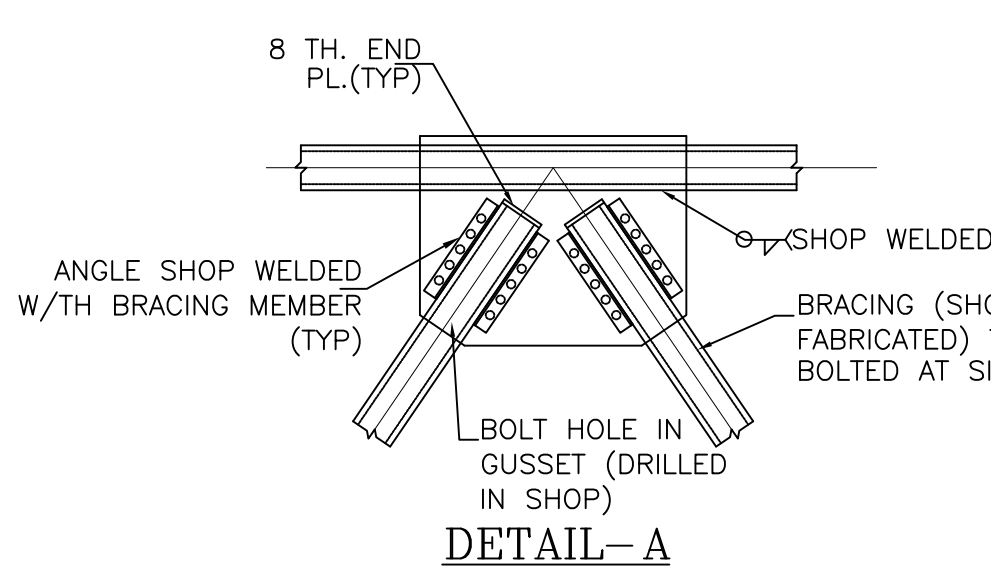
BASE PL. SCHEDULE

GROUP MKD.	COL. MKD.	ITEM MKD.	NO. OF BOLTS	DIA. OF BOLT	REMARKS
BP-1	ALL	BP	25		BASE PL. W/TH 4 NOS. GROUT PIPES AND 4 BOLT HOLE
		NO. OF BOLTS	6		TOTAL NUMBER AND DIA. OF BOLT
		DIA. OF BOLT	40		PL. BUTT WELDED TO COL. FL. PL.
		FT	SAME AS COL. FL. PL. THICKNESS		COL. WEB PL.
		WT	REFER COLUMN SECTION (REFER SH. 2 OF 2)		FL. STIFF. PL.
		FS	10		WEB STIFF. PL.
		WS	10		WASHER PL. W/TH 1-1/2" 4 BOLT HOLE
		WP	40		FL. CROSS STIFF. PL.
		FCS	10		WEB CROSS STIFF. PL.
		WCS	10		SHEAR KEY
		SKT	20		

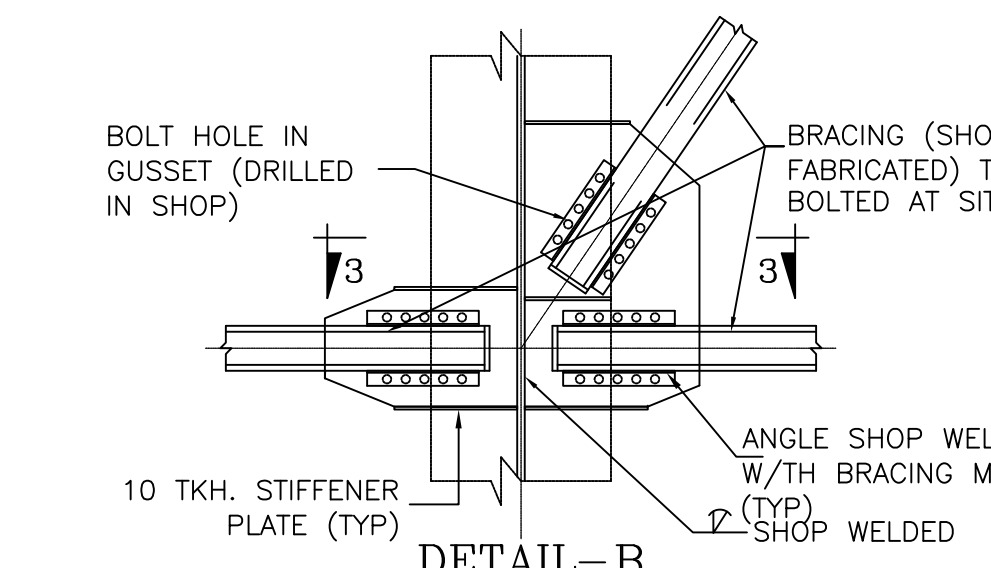
* # HOLES. = DIA. OF BOLT + 15 MM
** # HOLES. = DIA. OF BOLT + 3 MM

BASE PL. SCHEDULE

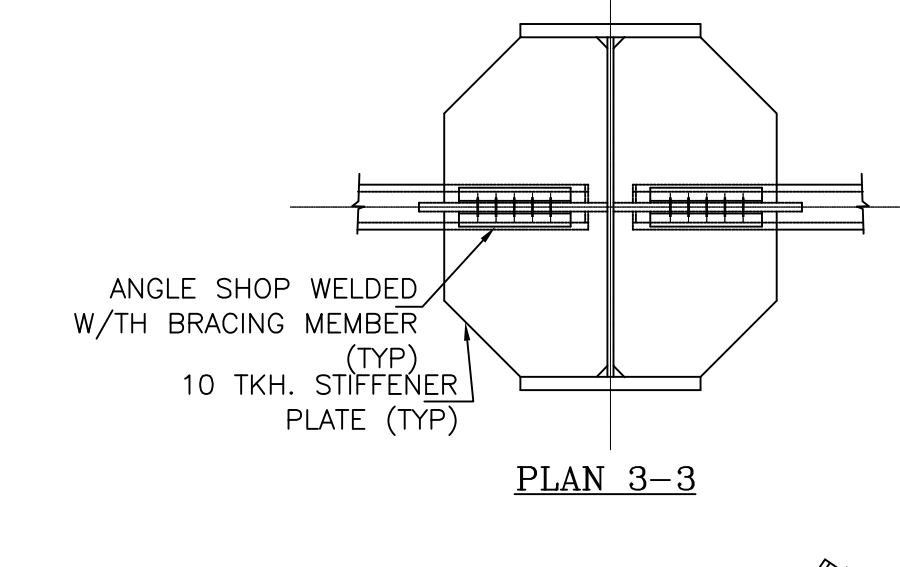
DIM MKD.	BP-1	REMARKS
A	900	BASE PLATE DIMENSIONS
B	420	
C		REFER COLUMN SCHEDULE
D		
E	25	
F	150	
G	200	
J	750	C/C OF BOLT
K	150	C/C OF BOLT
L	300	SHEAR KEY
M	150	
N	120	WASHER PLATE
O	300	HT. OF FLANGE STIFF. PL.
P	300	HT. OF WEB STIFF. PL.



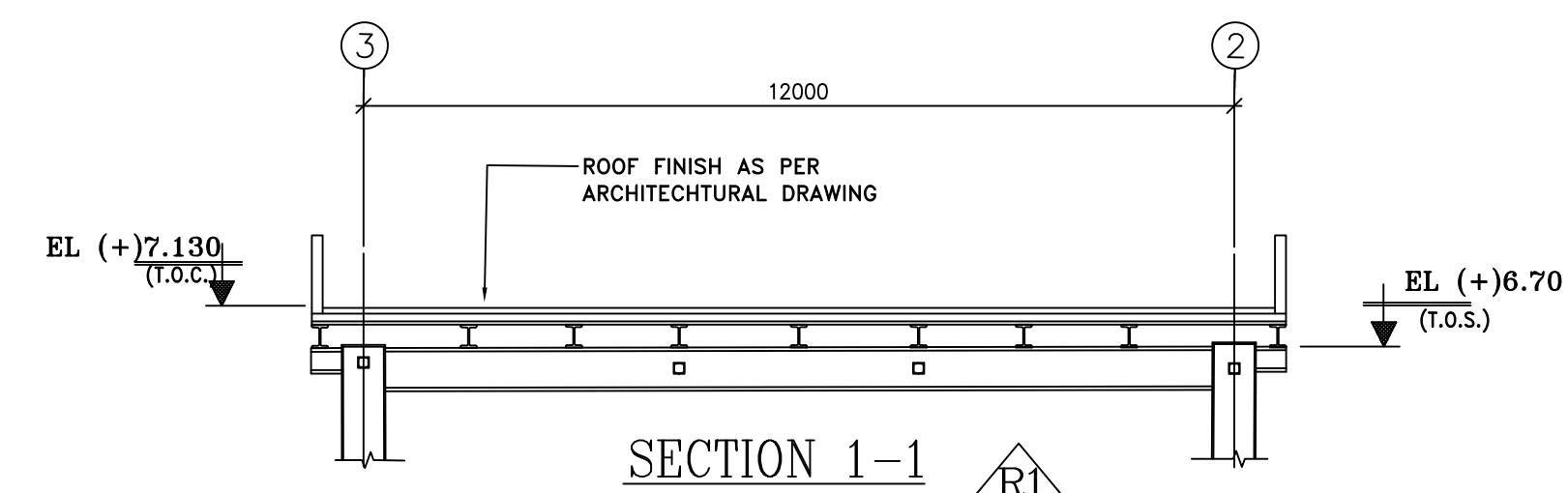
DETAIL-A



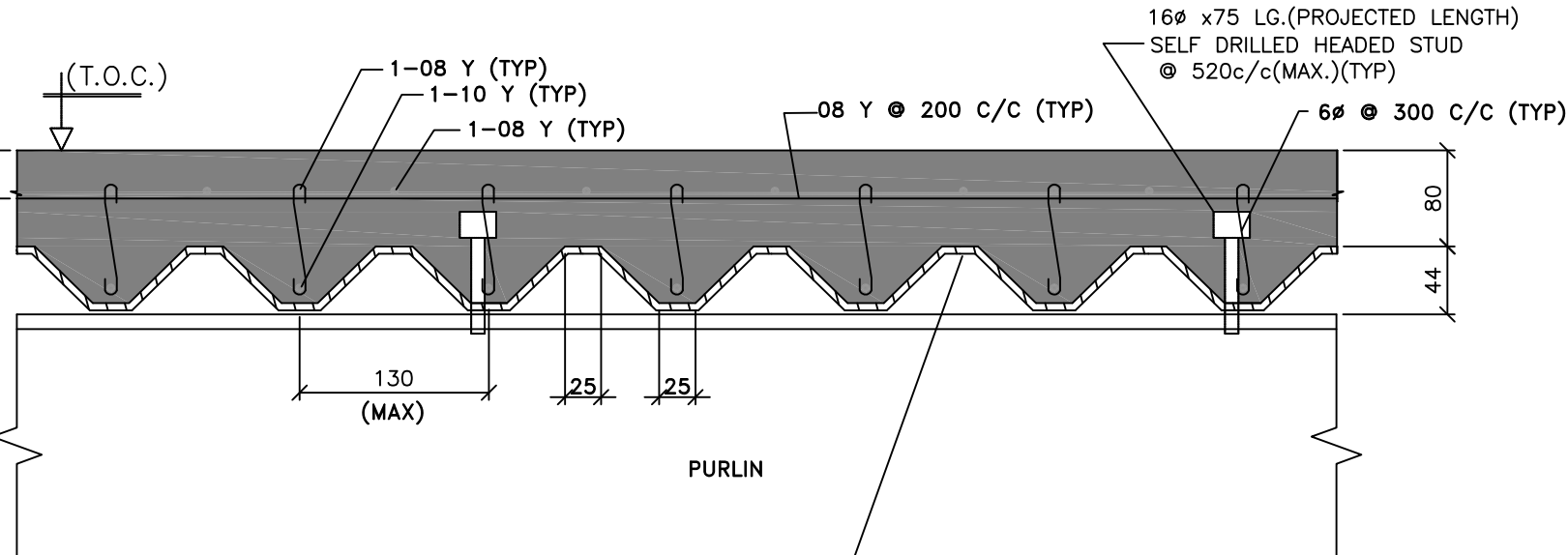
DETAIL-B



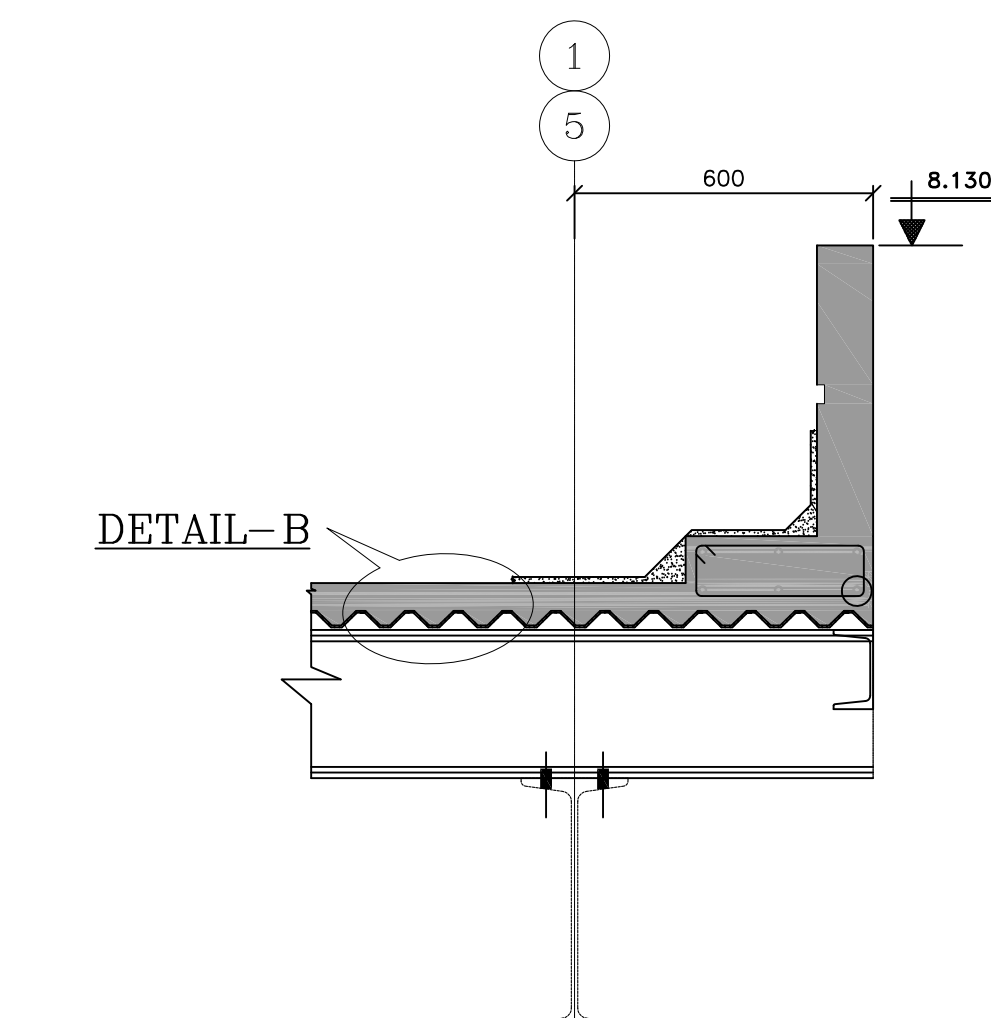
DETAIL-C



SECTION 1-1



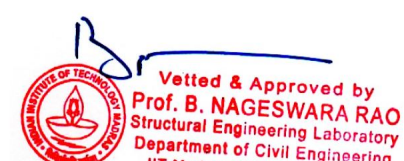
DETAIL-B



SECTION 1-1

(SLAB & PARAPET REINT. NOT SHOWN)
(FOR REINT. DETAILS REF. DWG. MAITREE-00-UTX-LC-100100-PEM)

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
RELEASED FOR CONSTRUCTION
ISSUED BY: FAIRUKH KAMAL
DATE: 04/12/2019
DRAWING APPROVED IN FIO-N CATEGORY IN PEM



NOTES

- THIS DRAW/NG SHALL BE READ IN CONJUNCTION W/TH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL(+)5.60 M.
- FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MAITREE-00-UTX-LC-100200-PEM.
- GRADE OF STEEL- E350, CONFORMING TO SA/IS-2062.
- CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- ALL SITE CONNECTIONS SHALL BE OF BOLTED TYPE UNLESS OTHERWISE.

REFERENCE DRAW/NGS :-

- MAITREE-00-MA-LD-421100M01PEM-C - PLOT PLAN
- MAITREE-00-UTX-LA-100100-PEM-A - MPH- GEN. NOTES & STD. DETAILS FOR CIVIL WORKS
- MAITREE-00-STA-DB-113201-PEM-3 --- LAYOUT OF WORKSHOP BUILDING

LEGENDS :-

T.O.S. - TOP OF CONCRETE
U.N.O. - UNLESS NOTED OTHERWISE
TYP. - TYPICAL
MC - MOMENT CONNECTION
F.F.L. - FINISHED FLOOR LEVEL

STRUCTURAL STEEL QUANTITY = 80 MT
(APPROX. FOR SHEET 6 & 7)

DATE: 22 Nov 2019

SIGNATURE: SACHIN PANDIT

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019

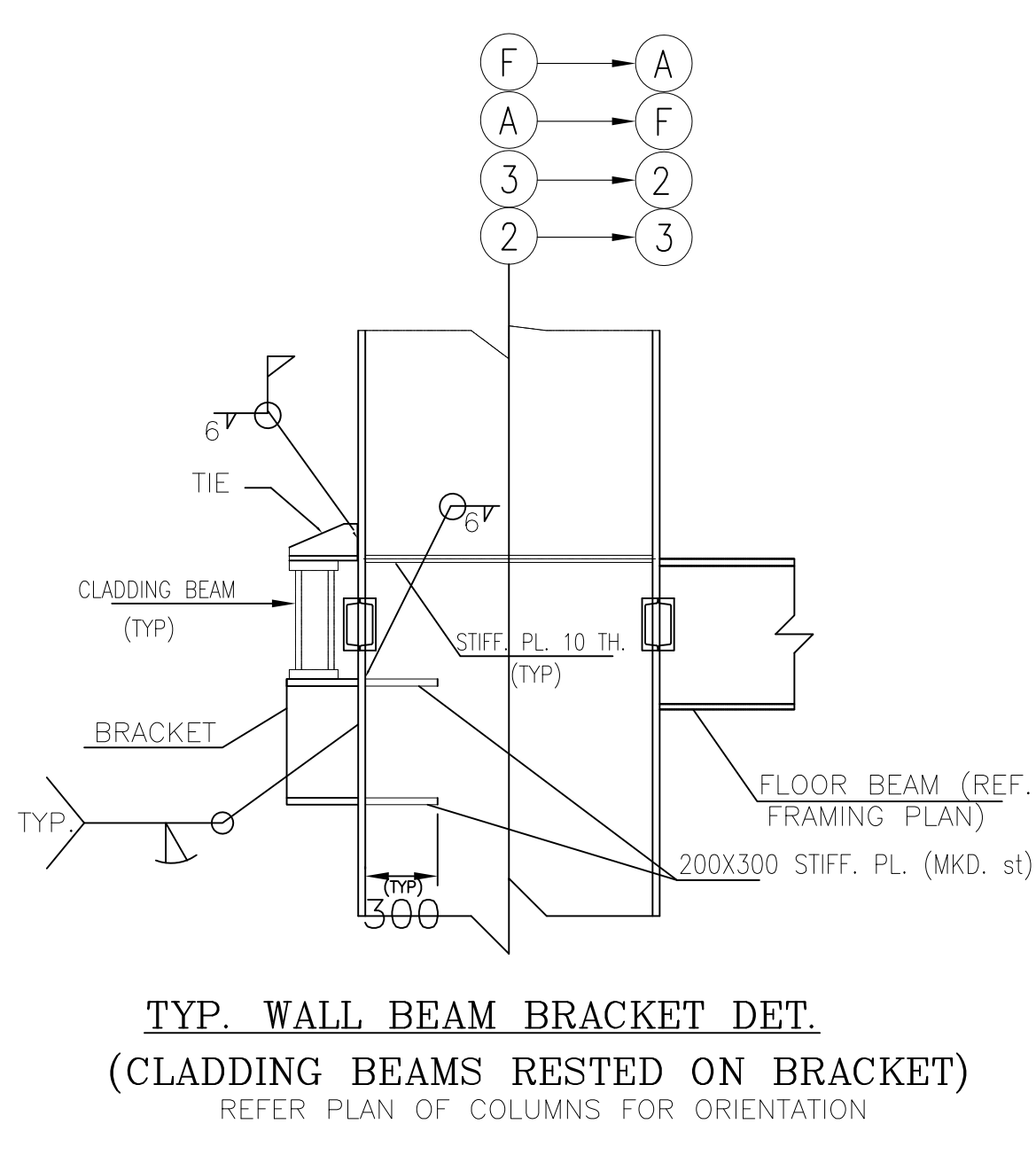
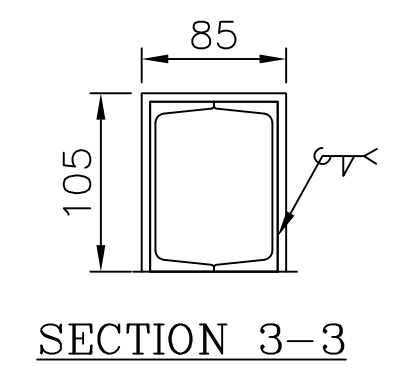
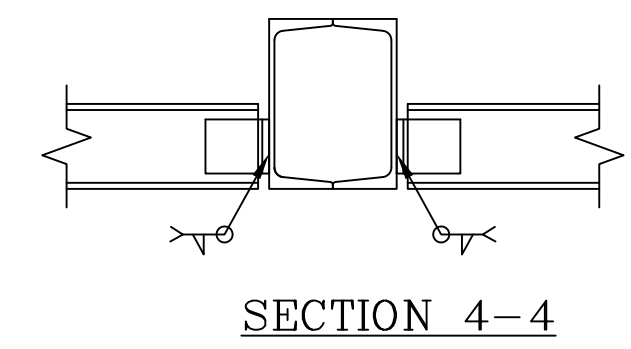
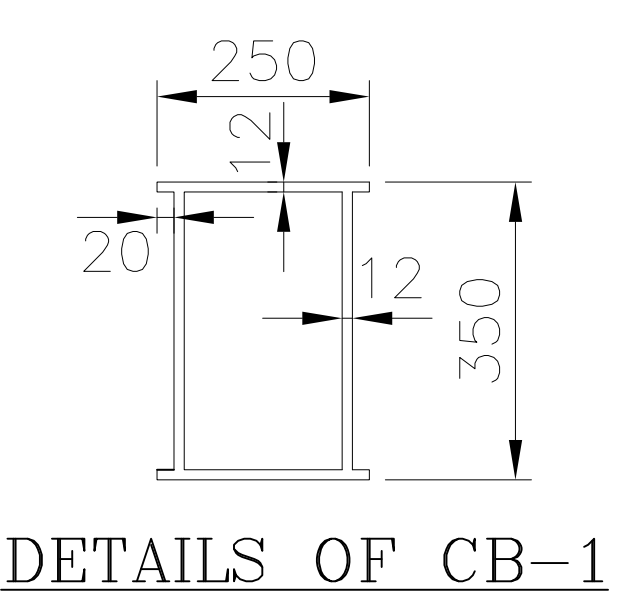
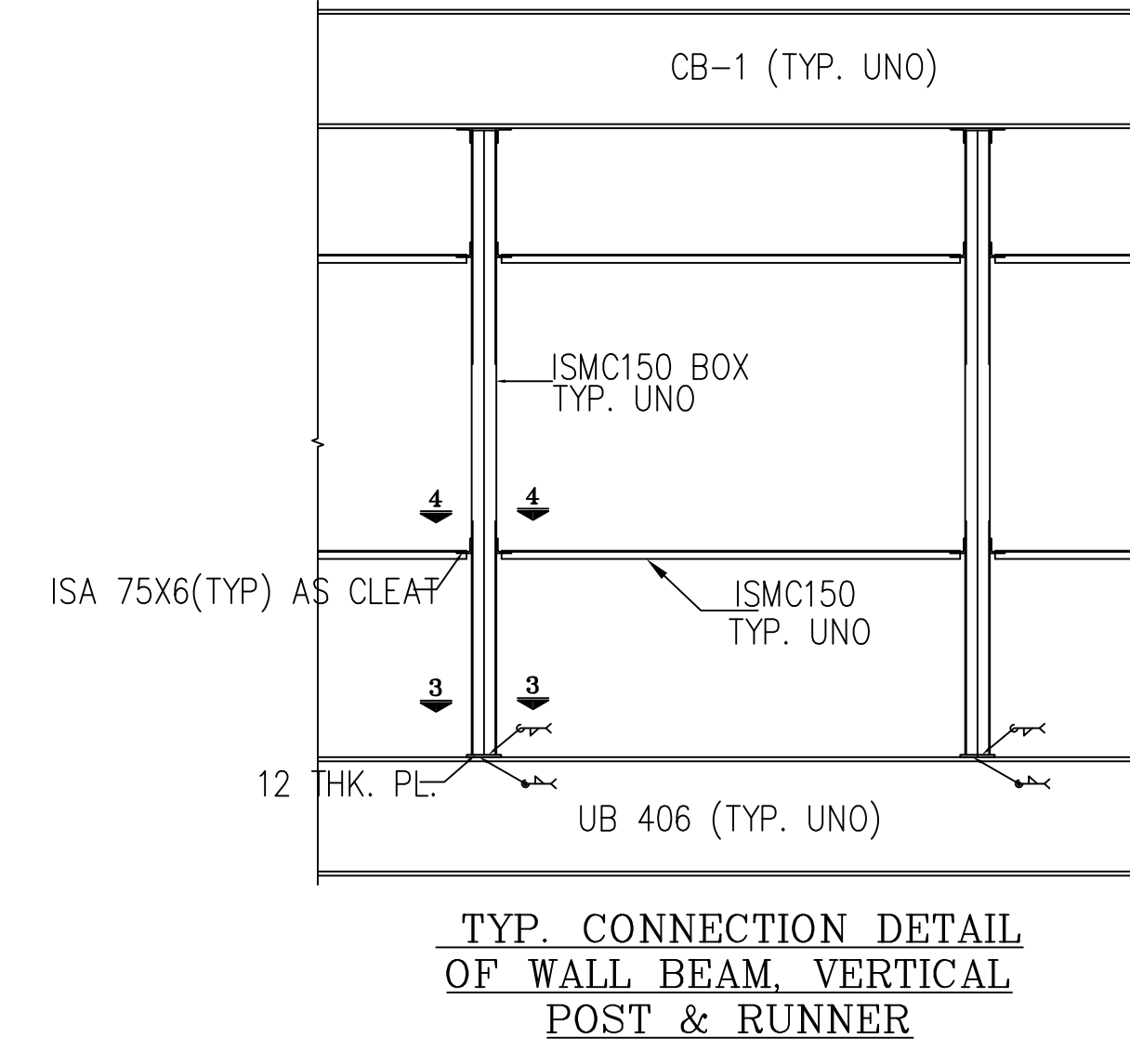
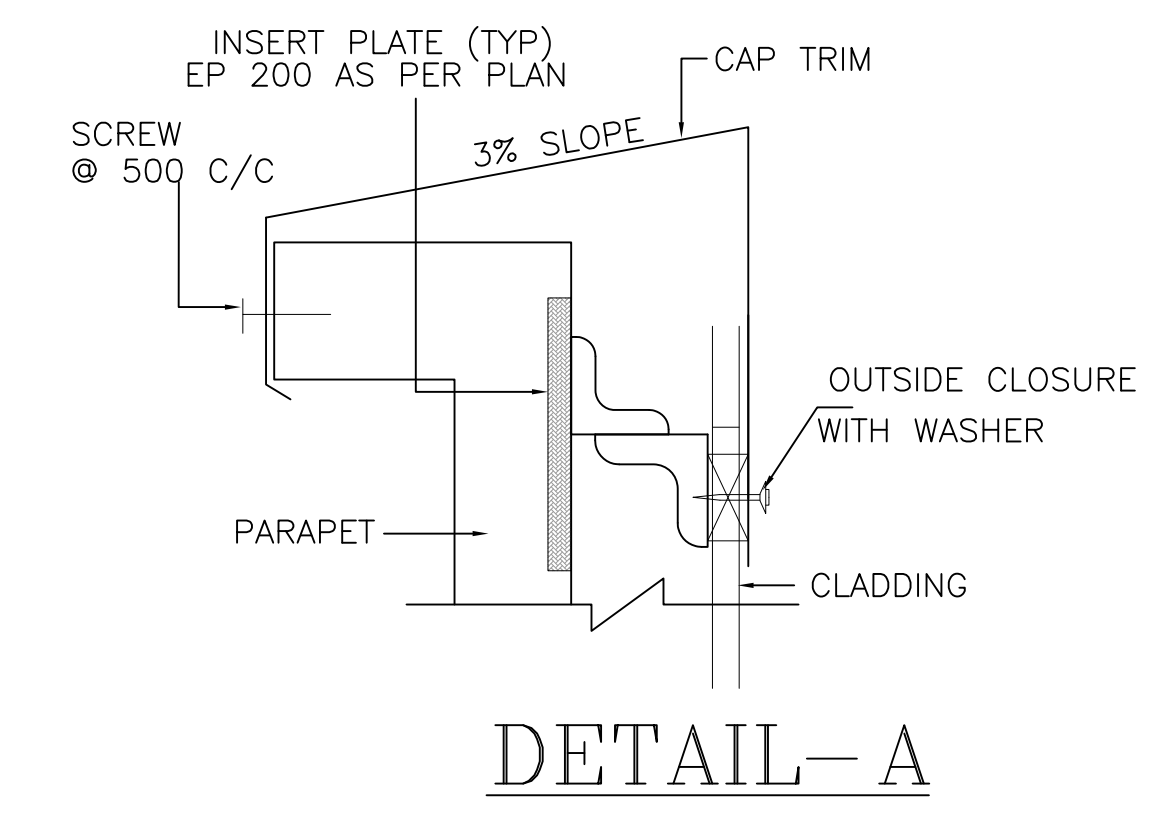
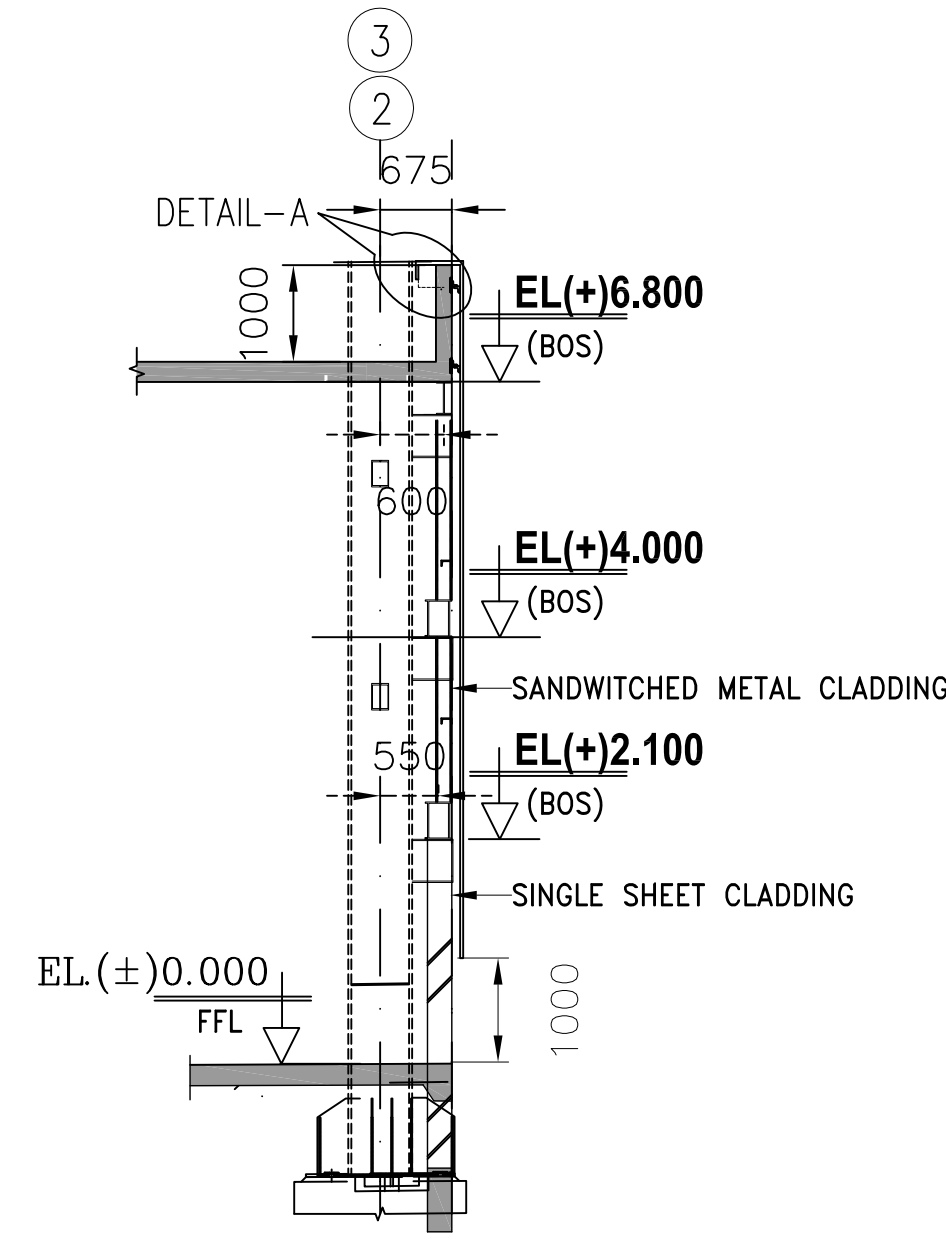
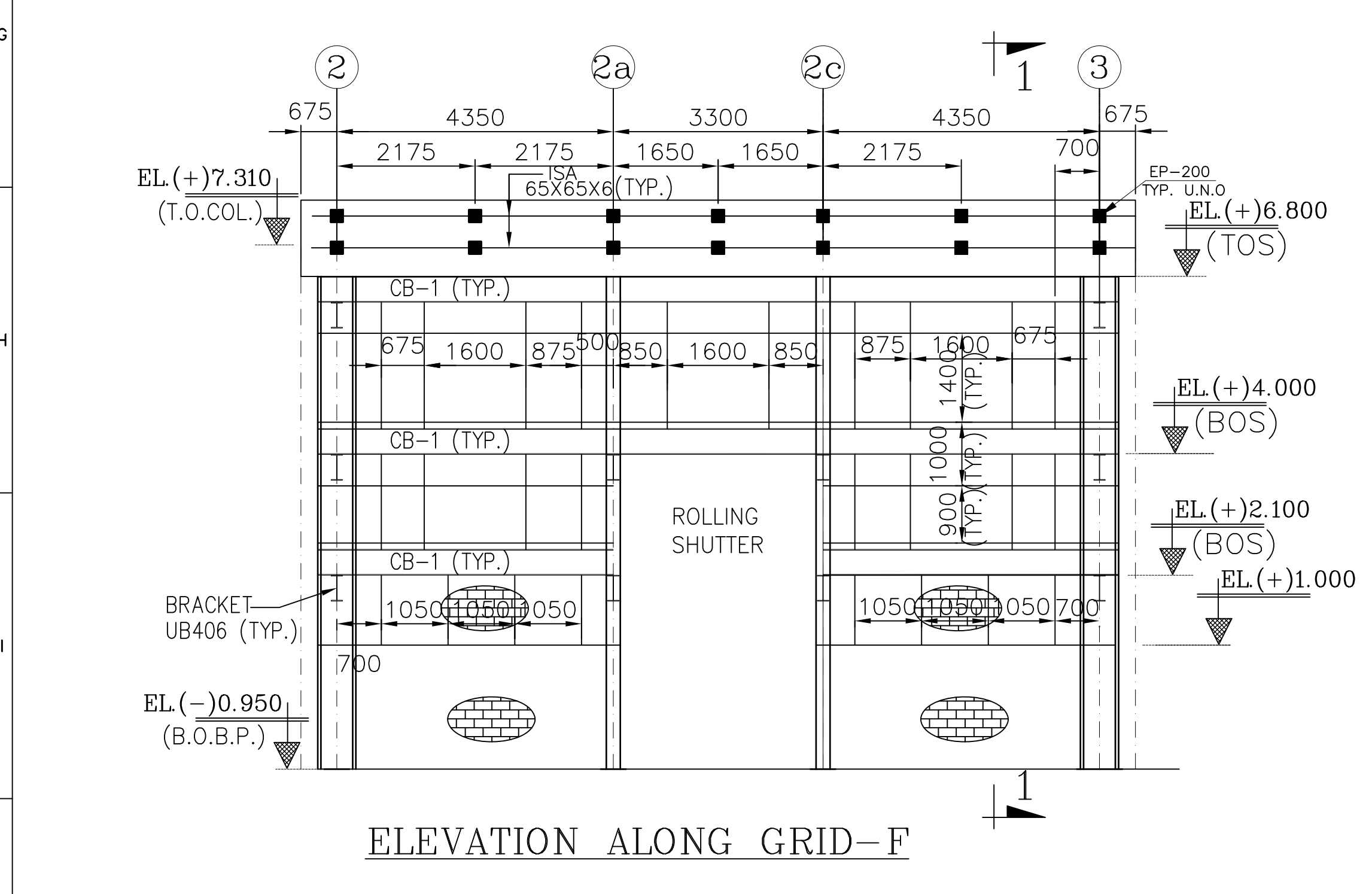
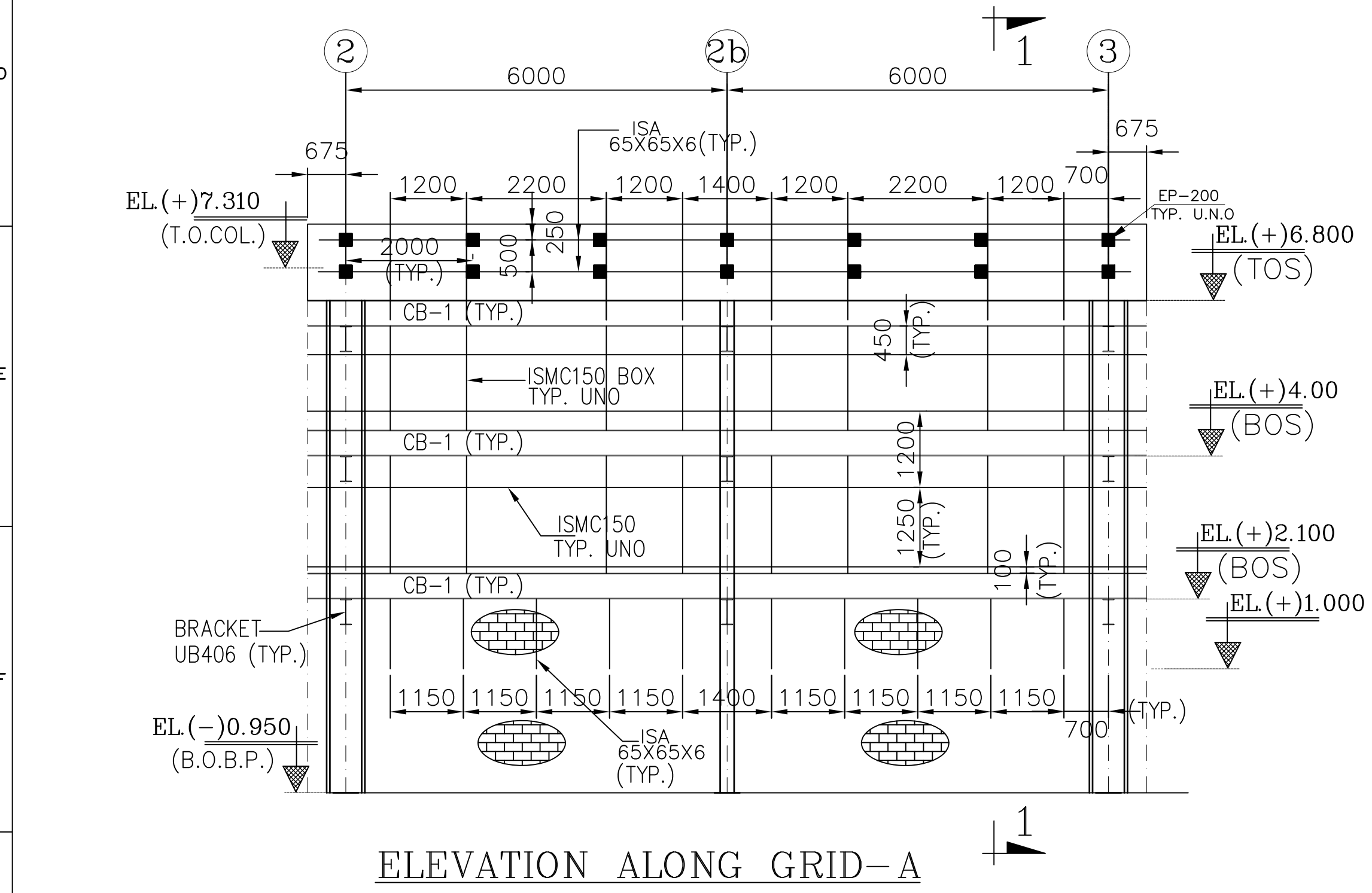
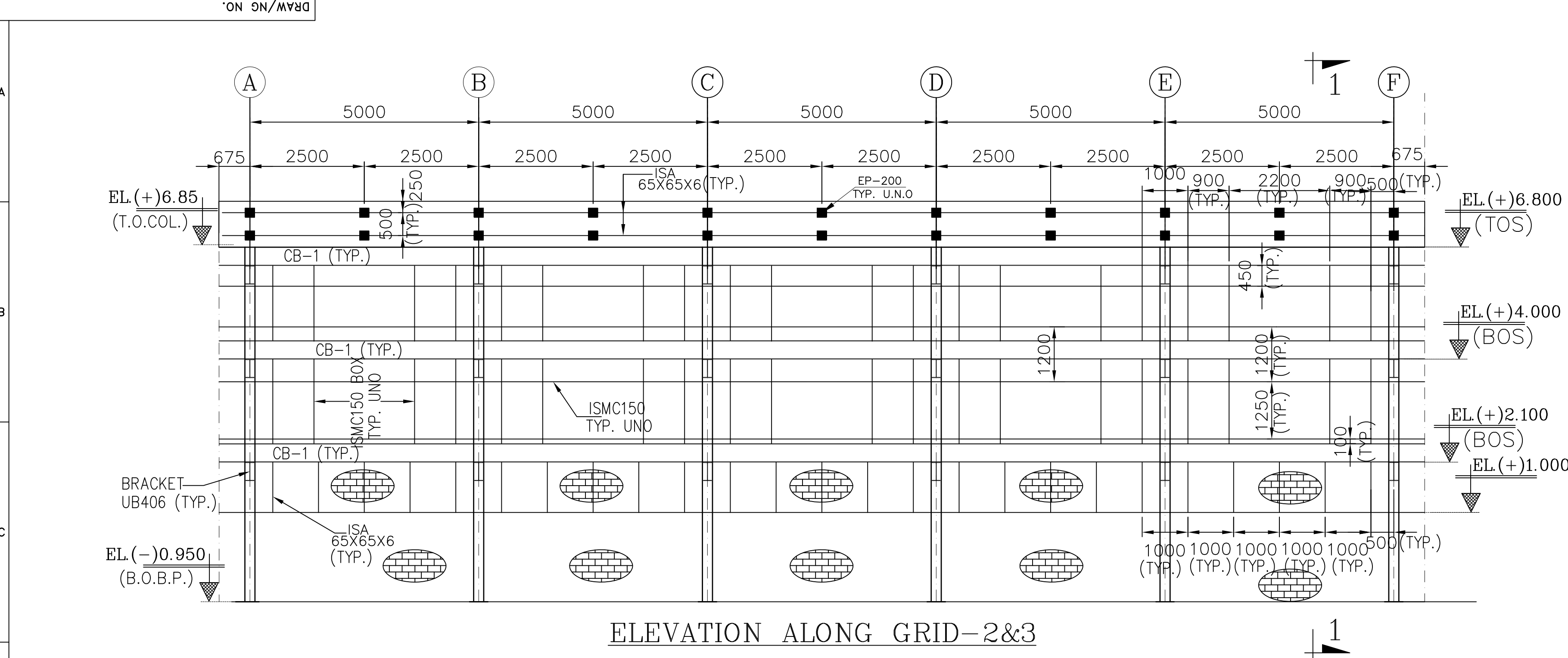
DATE: 22 Nov 2019

DATE: 22 Nov 2019

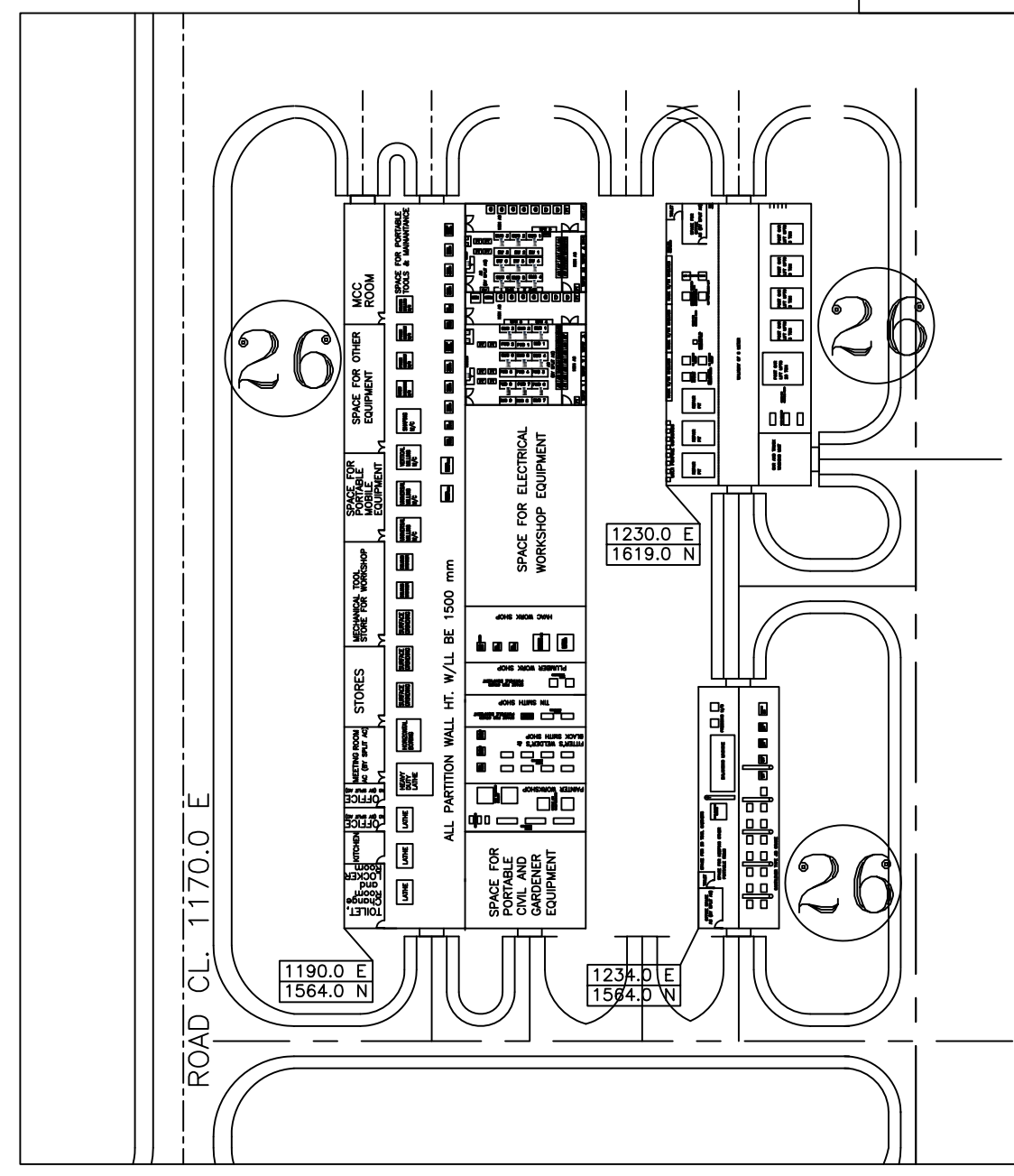
DATE: 22 Nov 2019

DATE: 22 Nov 2019

DATE: 22 Nov 2019



BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
RELEASED FOR CONSTRUCTION
ISSUED BY: FARBUKHI JAMAL
DATE: 04/12/2019
DRAWING APPROVED IN PDS-CATEGORY IN PDS



- NOTES**
- THIS DRAW/NG SHALL BE READ IN CONJUNCTION W/TH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERW/SE.
 - ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL.(+) 5.60 M.
 - FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MAITREE-00-UTX-LC-100200-PEM.
 - GRADE OF STEEL- E350, CONFIRMING TO SA/IS-2062.
 - CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
 - ALL SITE CONNECTIONS SHALL BE OF BOLTED TYPE UNLESS SHOWN OTHERWISE.
- REFERENCE DRAW/NGS :-**
- MAITREE-0-MA-LD-421100M001PEM-C - PLOT PLAN
 - MAITREE-00-UTX-LA-100100-PEM-A - MPH- GEN. NOTES & STD. DETAILS FOR CIVIL WORKS
 - MAITREE-00-STA-DB-113201-PEM-3 --- LAYOUT OF WORKSHOP BUILDING
- LEGENDS:-**
- T.O.S. - TOP OF CONCRETE
U.N.O.- UNLESS NOTED OTHERW/SE
TYP. - TYPICAL
MC - MOMENT CONNECTION
F.F.L - FINISHED FLOOR LEVEL

STRUCTURAL STEEL QUANTITY = 80 MT (APPROX. FOR SHEET 6 & 7)

3	22.11.19	RAHUL	BA	SP	DRAWING REVISED & CHANGES MARKED AS A3
2	15.05.19	BA	BA	SACHIN	DRAWING REVISED INLINE WITH CUSTOMER COMMENTS.CHANGE MARKED AS A2
DATE	ALTERED	CHECKED	APPROVED	NOTE	
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICTNER M/s FICTNER GmbH & Co KG, Stuttgart,GERMANY			OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA		
DRAWN BY	DATE	NAME	TITLE		
DESIGN BY	11.09.2019	RAHUL	CARPENTRY WORKSHOP DETAILS OF CLADDING		
CHECKED BY	11.09.2019	BHEESHM			
APPROVED BY	11.09.2019	S.P.			
SUPERSEDES:	11.09.2019	A.N.			
SUPERSEDED BY:			SIZE: A1	PROJECT NO.: 421	FILE:
SYSTEM:			ANNEX:	15	DRAW/NG NO.MAITREE-00-UST-LB-100345-PEM
			REV 3		

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)

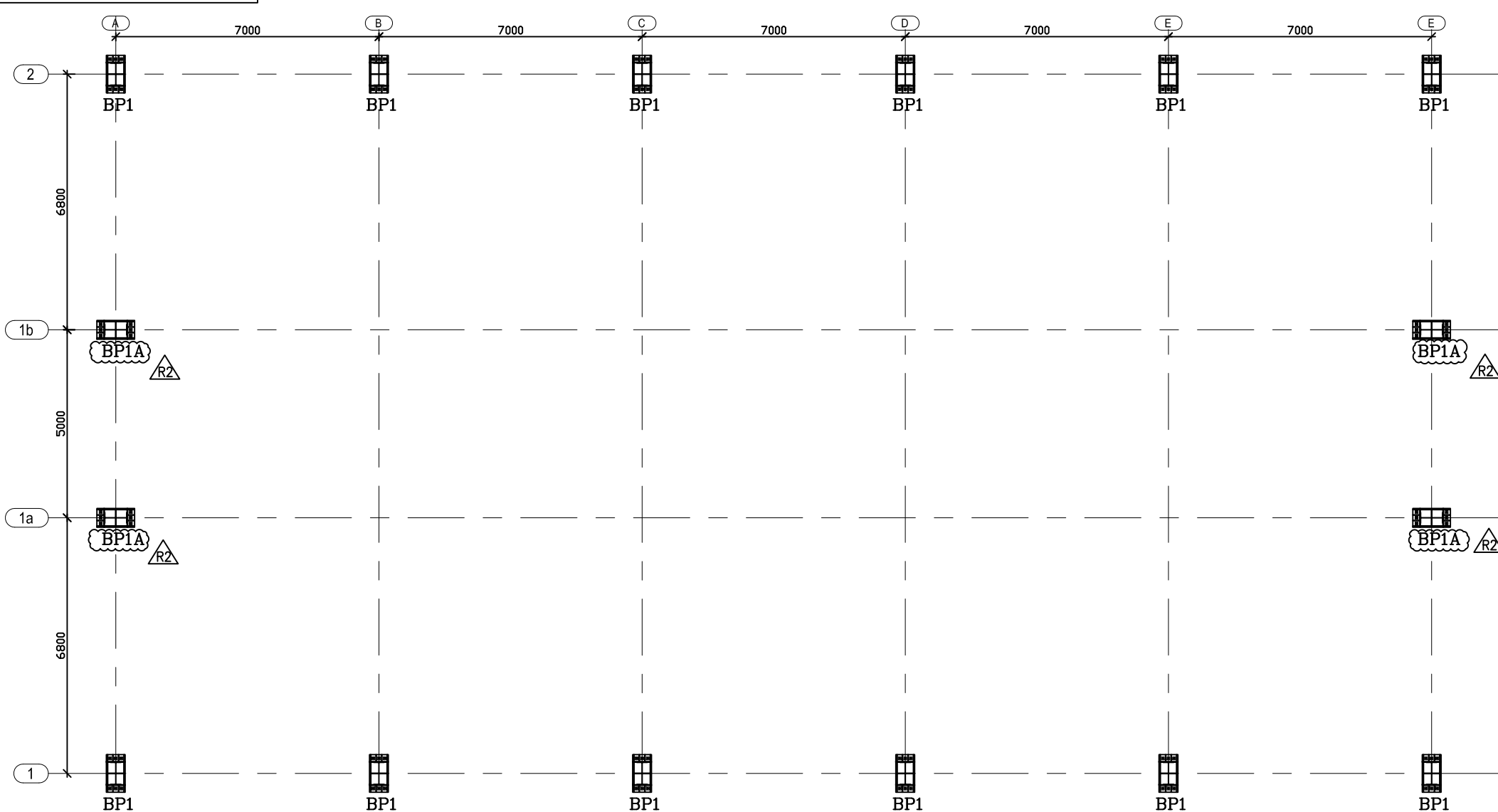
RELEASED FOR CONSTRUCTION

ISSUED BY

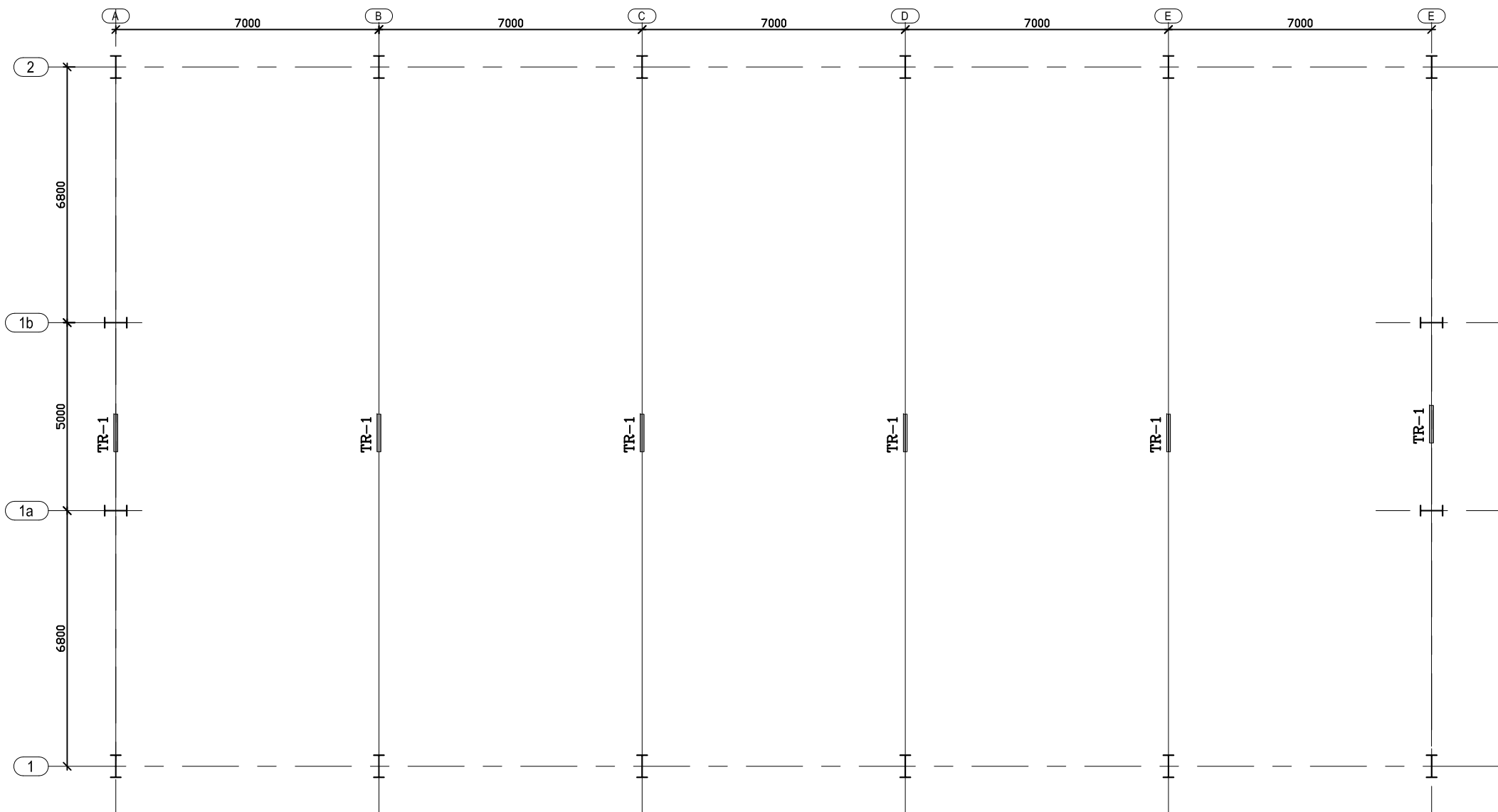
AMAN SHARMA

DATE

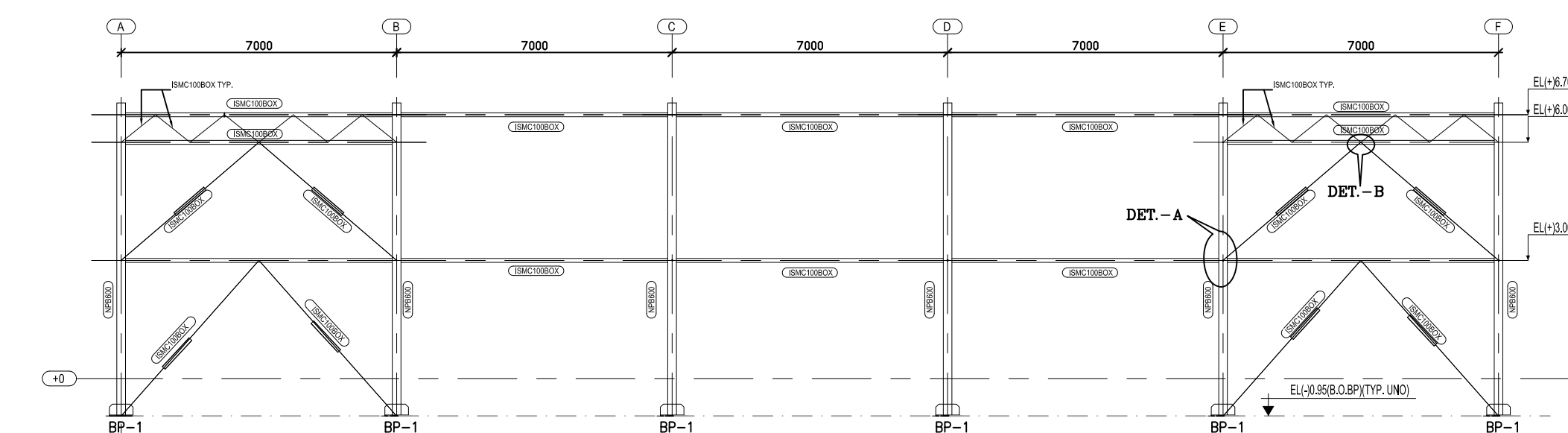
20/01/2020



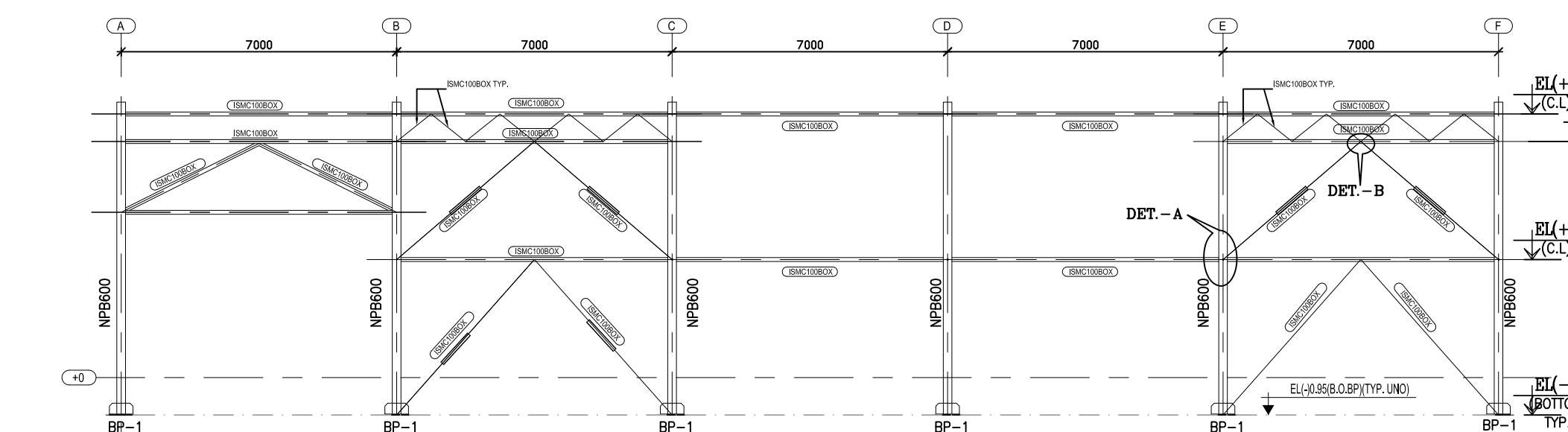
PLAN AT BASE PLATE LEVEL



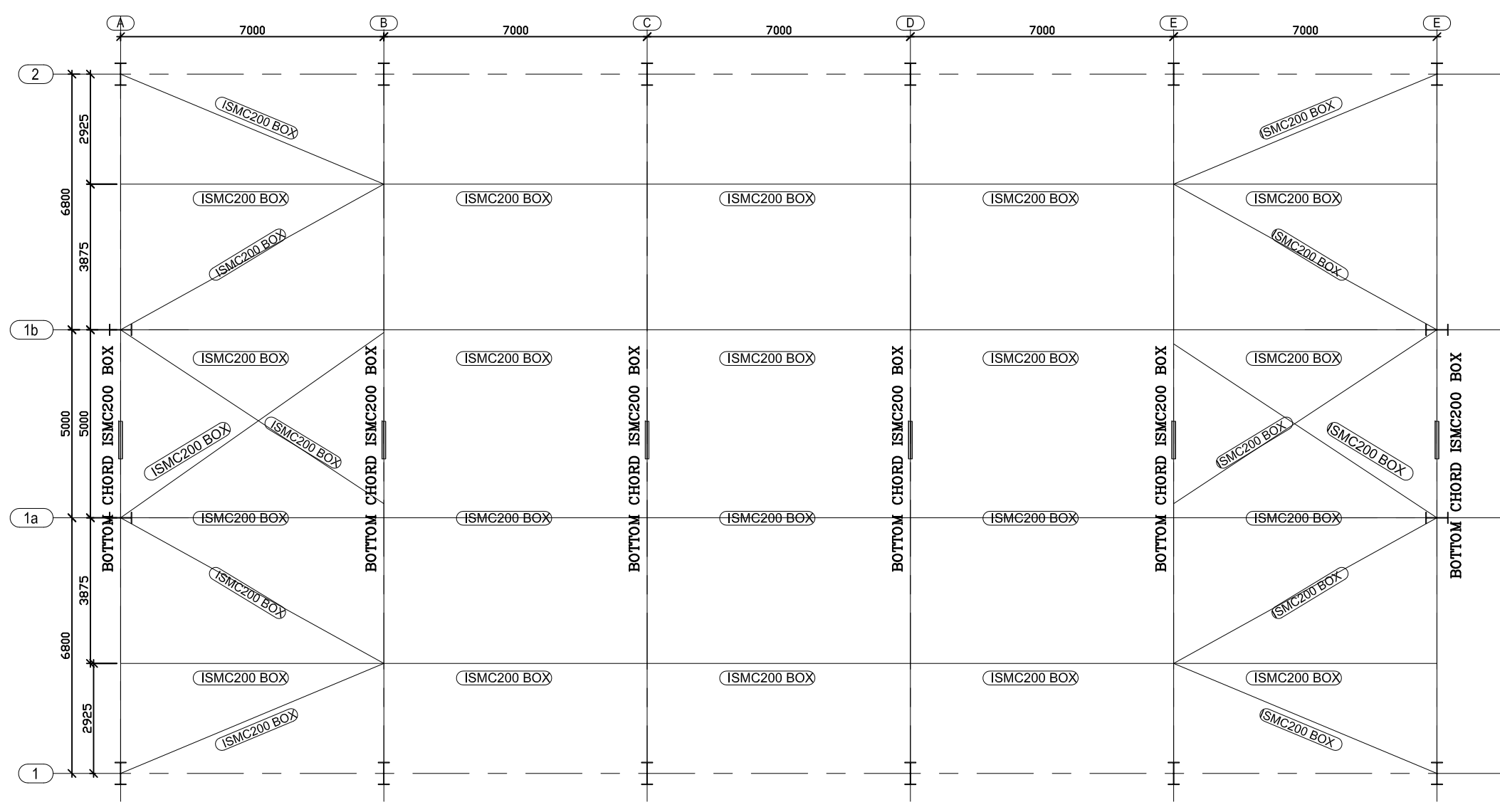
TRUSS PLAN AT ROOF LEVEL



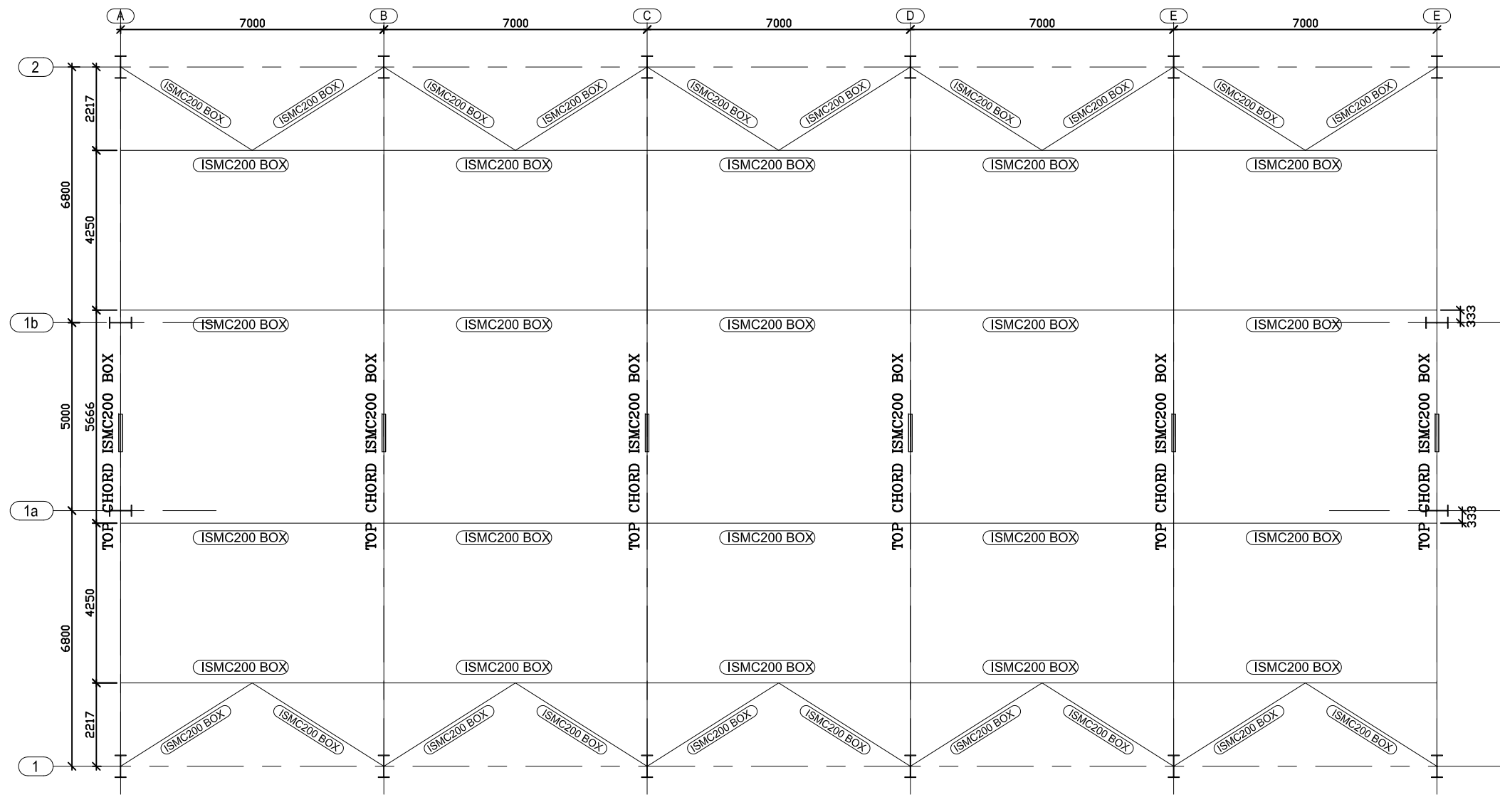
FRAMING ELEVATION ON GRID-2



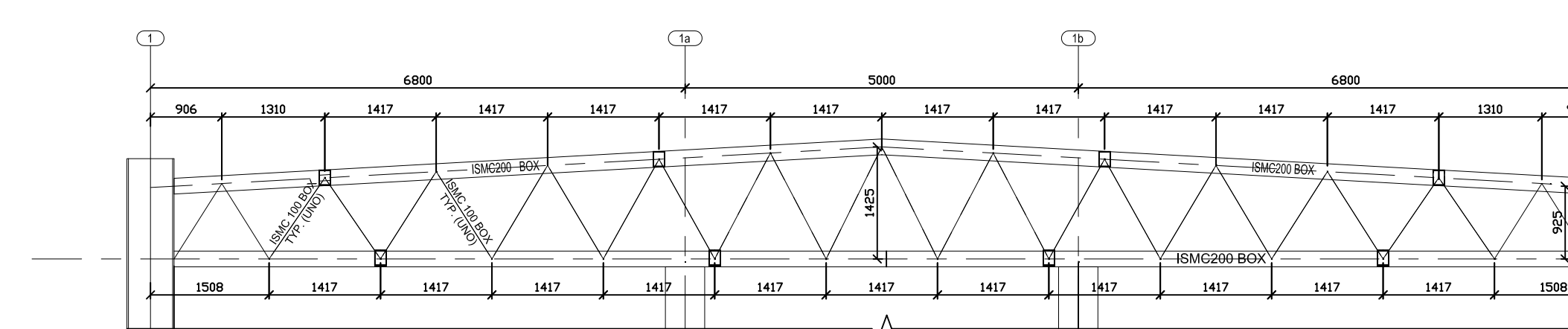
FRAMING ELEVATION ON GRID-1



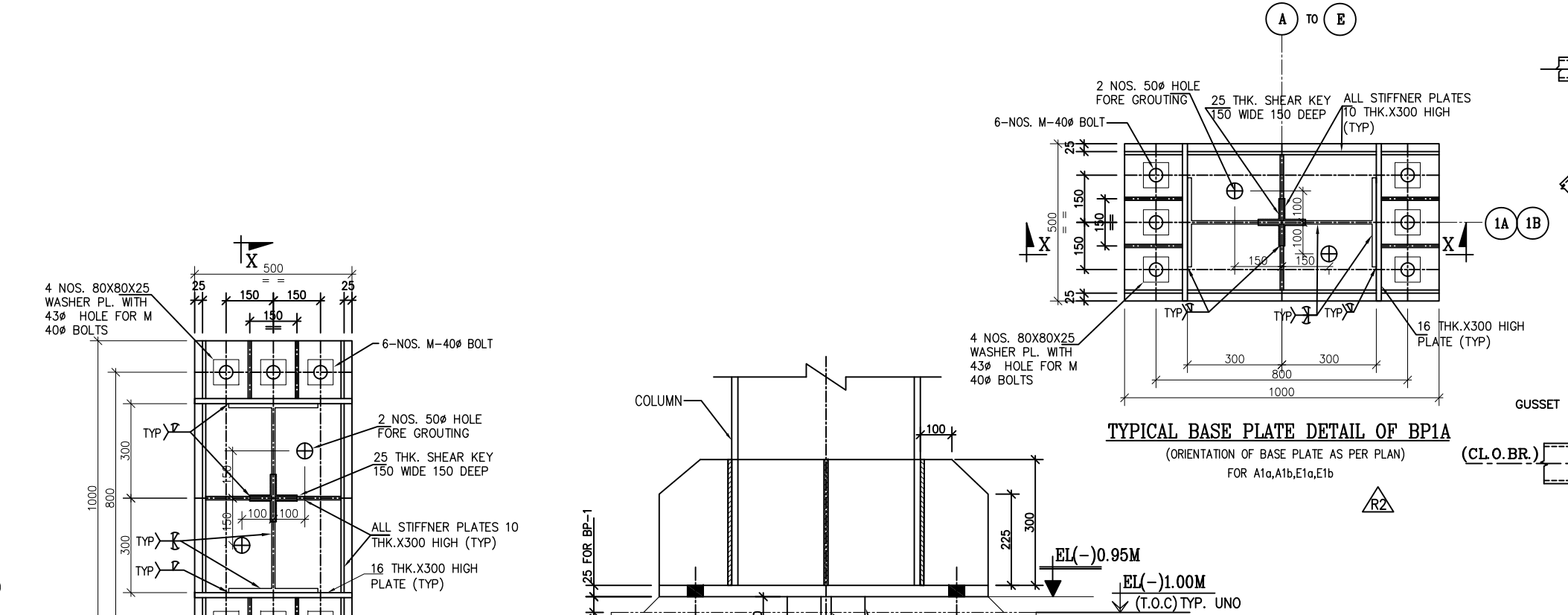
BOTTOM CHORD BRACING



TOP CHORD BRACING



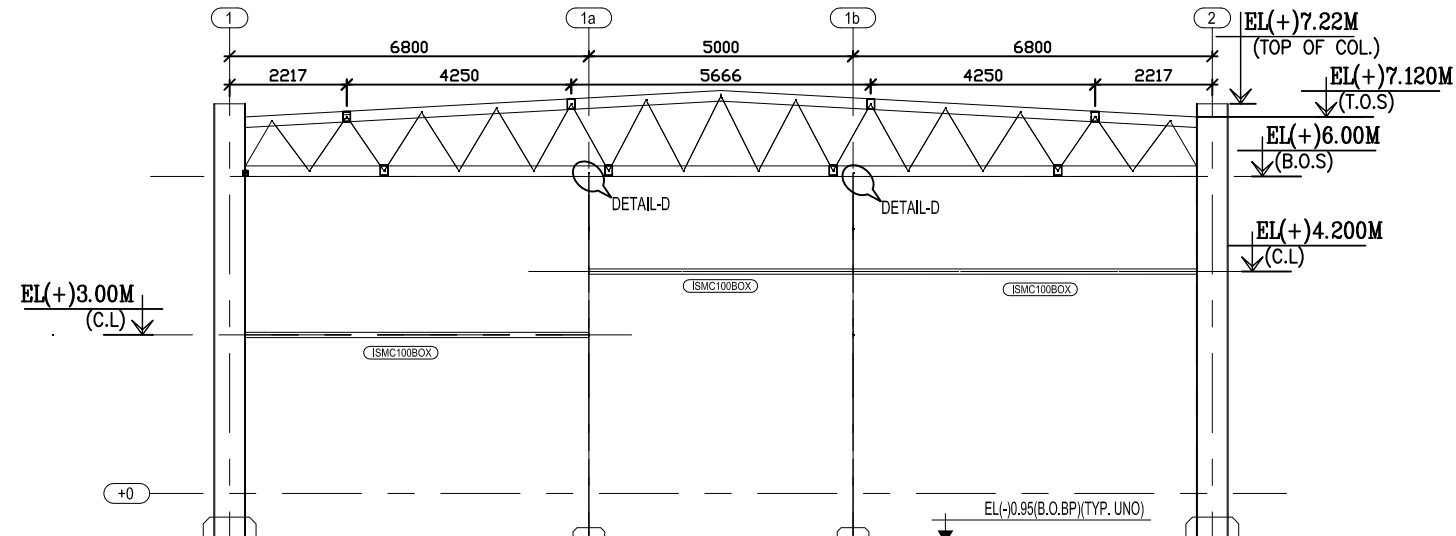
TYP DETAIL OF TR-1



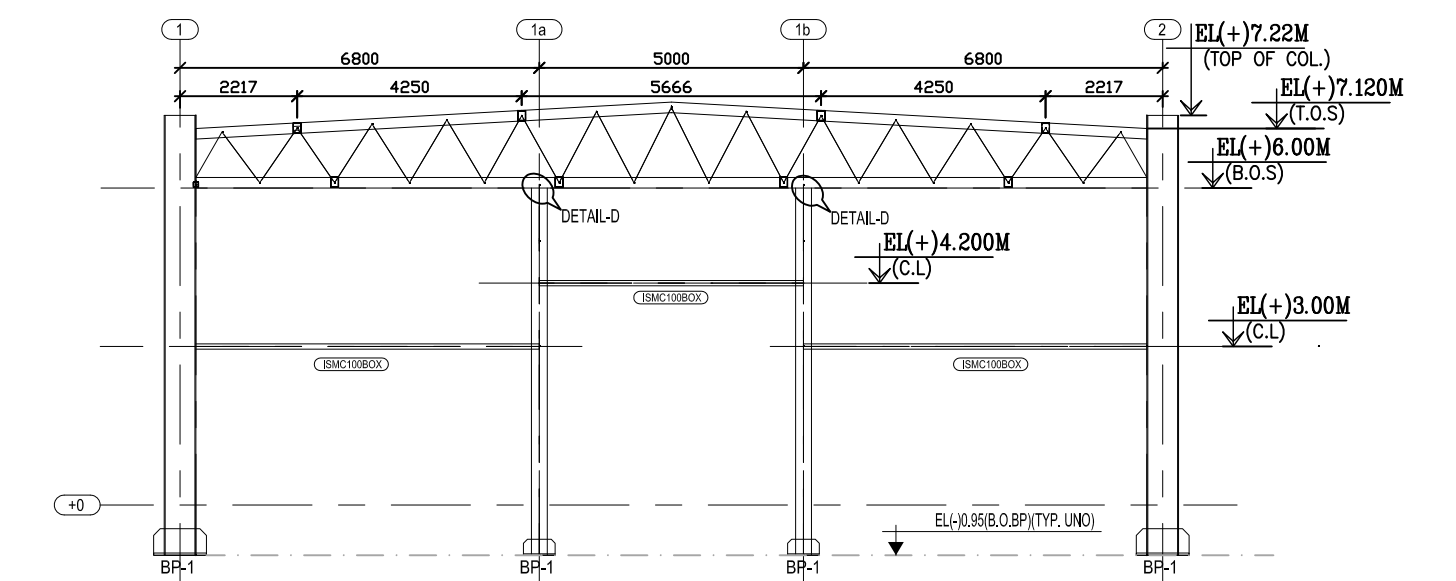
TYPICAL BASE PLATE DETAIL OF BP1

(ORIENTATION OF BASE PLATE AS PER PLAN)

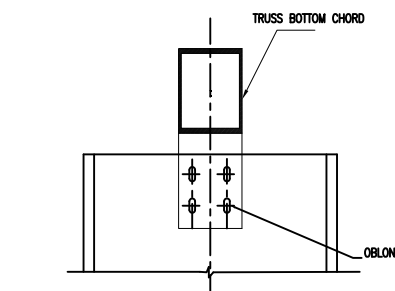
SECTION X-X



FRAMING ELEVATION ON GRID-A



FRAMING ELEVATION ON GRID-E



DETAIL AT - 'D'

NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL (+) 5.80 M.
- GRADE OF STEEL- E350, CONFORMING TO SA/IS-2062.
- FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MATREE-00-UTX-LC-100200-PHM.
- FOR GROUTING OF BASE PLATE REF. DRG. NO. MATREE-00-UMA-LB-100111-PHM.
- CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- ALL SITE CONNECTION SHALL BE BOLTED.

REFERENCE DRGS:

- MATREE-00-STA-DB-113201-PHM-3 --- LAYOUT OF WORKSHOP BUILDING
- MATREE-00-UTX-LC-100200-PHM --- GENERAL NOTES FOR STRUCTURE STEEL WORKS
- MATREE-00-MA-LD-421100M01-PHM-C --- PLOT PLAN

LEGEND

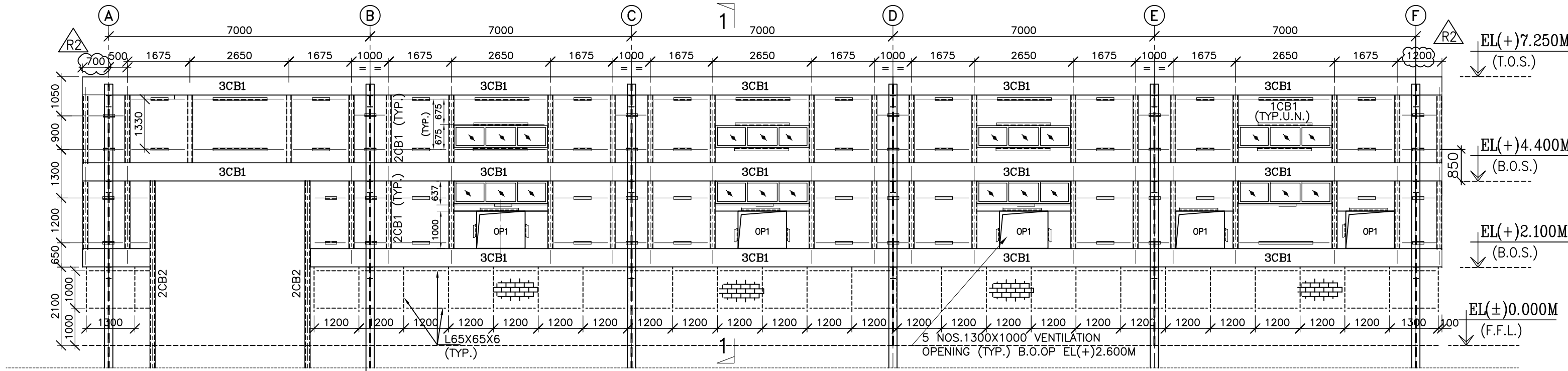
- (CL.O.G.) --- CENTER LINE OF GUSSET
- (B.O.BP) --- BOTTOM OF BASE PLATE
- (T.O.S) --- TOP OF STEEL
- (B.O.S) --- BOTTOM OF STEEL
- (T.O.COL) --- TOP OF COLUMN
- THK. --- THICKNESS
- EL --- ELEVATION
- TYP --- TYPICAL
- (CL.O.BR) --- CENTER LINE OF BRACING
- MC --- MOMENT CONNECTION
- U.N.O. --- UNLESS NOTED OTHERWISE
- FTL --- FINISHED FLOOR LEVEL
- DET. --- DETAIL

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□ COMMENTS/ APPROVAL	
□ PLANNING/ INFORMATION	
□ CONSTRUCTION	
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ISSUED BY	
NAME	SACHIN PANDIT
SIGNATURE	Sd/-
DATE	24 June 2019

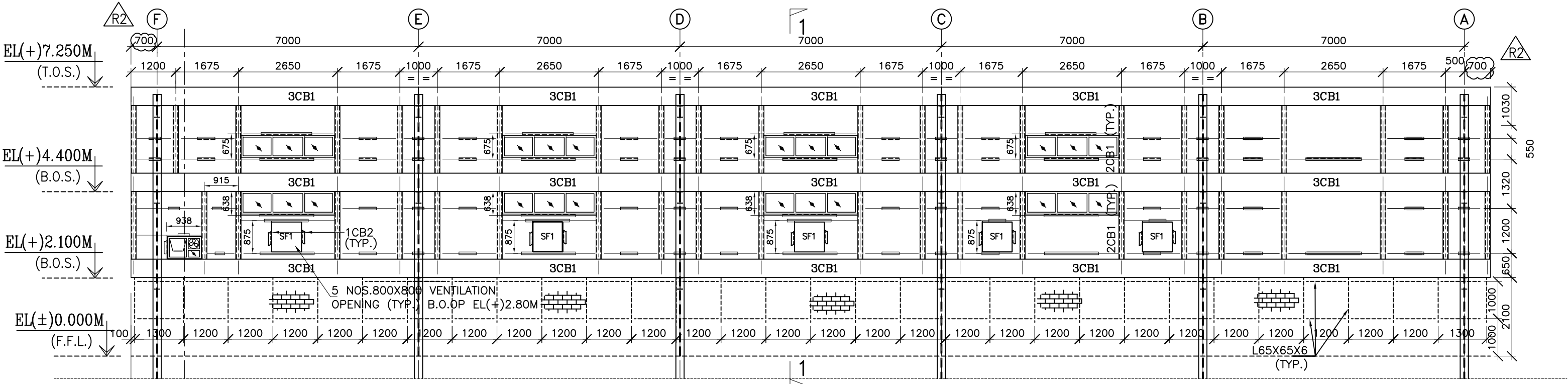
STRUCTURAL STEEL QUANTITY- 225 MT
(APPROX) FOR SHEET 1 AND 2 ONLY

NO.	DATE	REVISION	BY	FOR
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1	24.06.19	RK	BA	SP

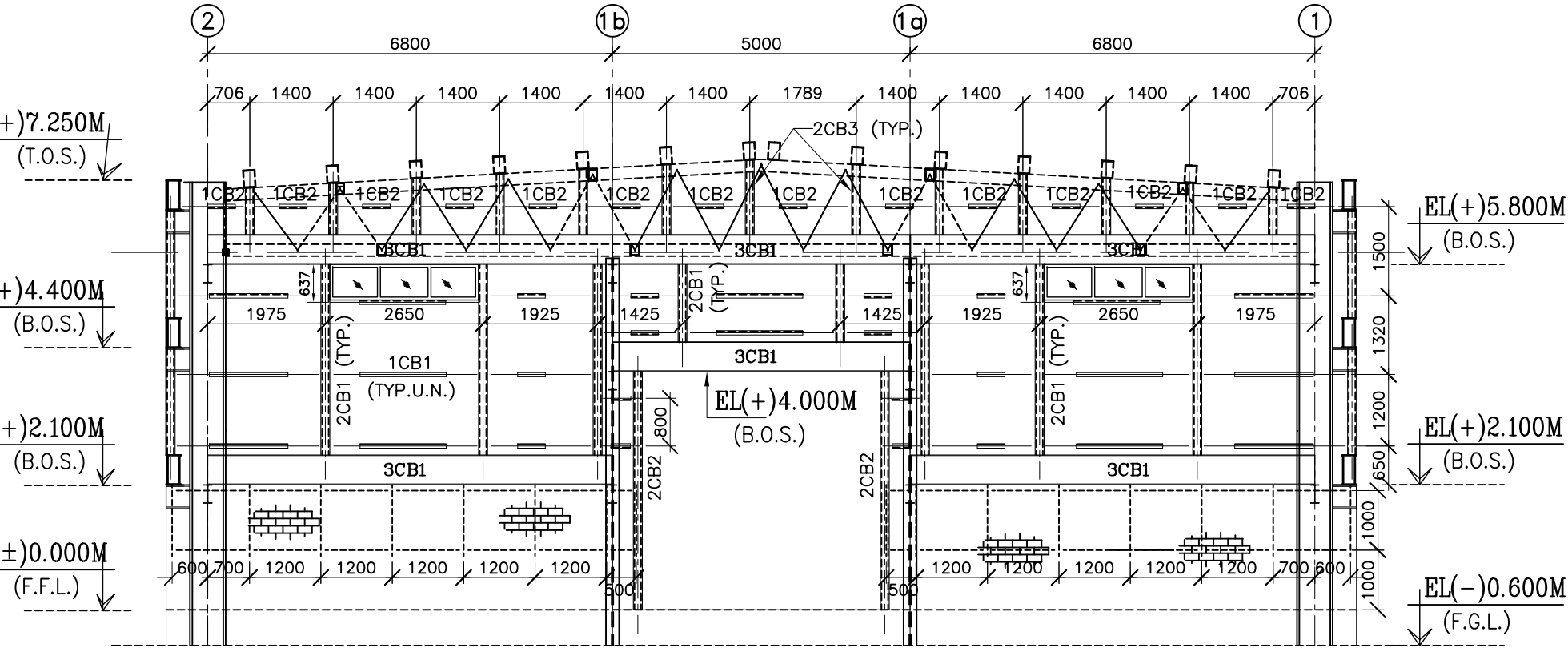
PROJECT
2x660MW MATREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH
(EPC MAIN PLANT PACKAGE)OWNER CONSULTANT:
FICHTNER
M/s FICHTNER GmbH
& Co KG,
Stuttgart, GERMANYOWNER:
BANGLADESH-INDIA FRIENDSHIP POWER
COMPANY (PVT.) LIMITED, BANGLADESH
Bharat Heavy Electricals Ltd
POWER ENGINEERING MANAGEMENT
INDIADESIGNED BY: 07.03.2019 BHE/SHW
CHECKED BY: 07.03.2019 S.P.
APPROVED BY: 07.03.2019 A.N.
SUPERSEDED BY:SYSTEM: ANNE: DRAWING NO: MATREE-00-UTX-LC-100545-PHM
PROJECT NO: 421
FILE: REV 2



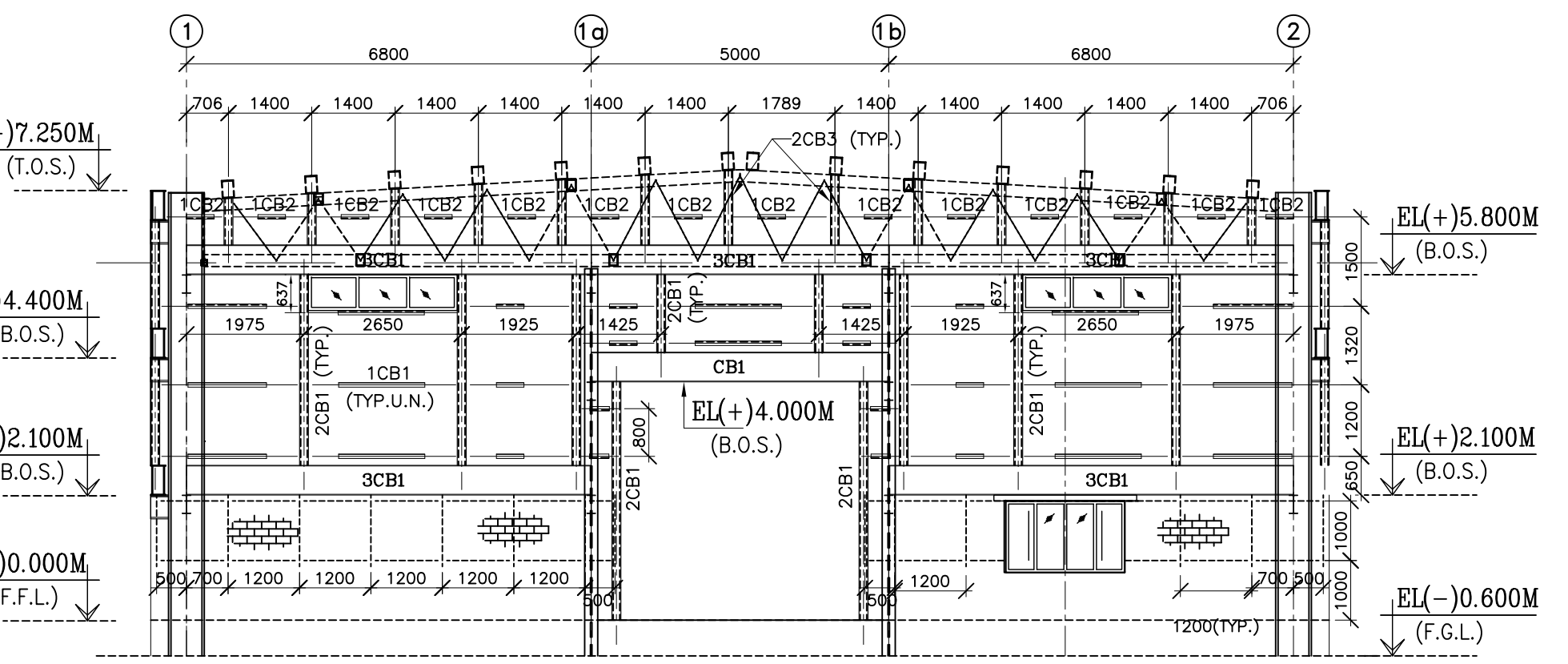
FRAMING ELEVATION ON GRID-1



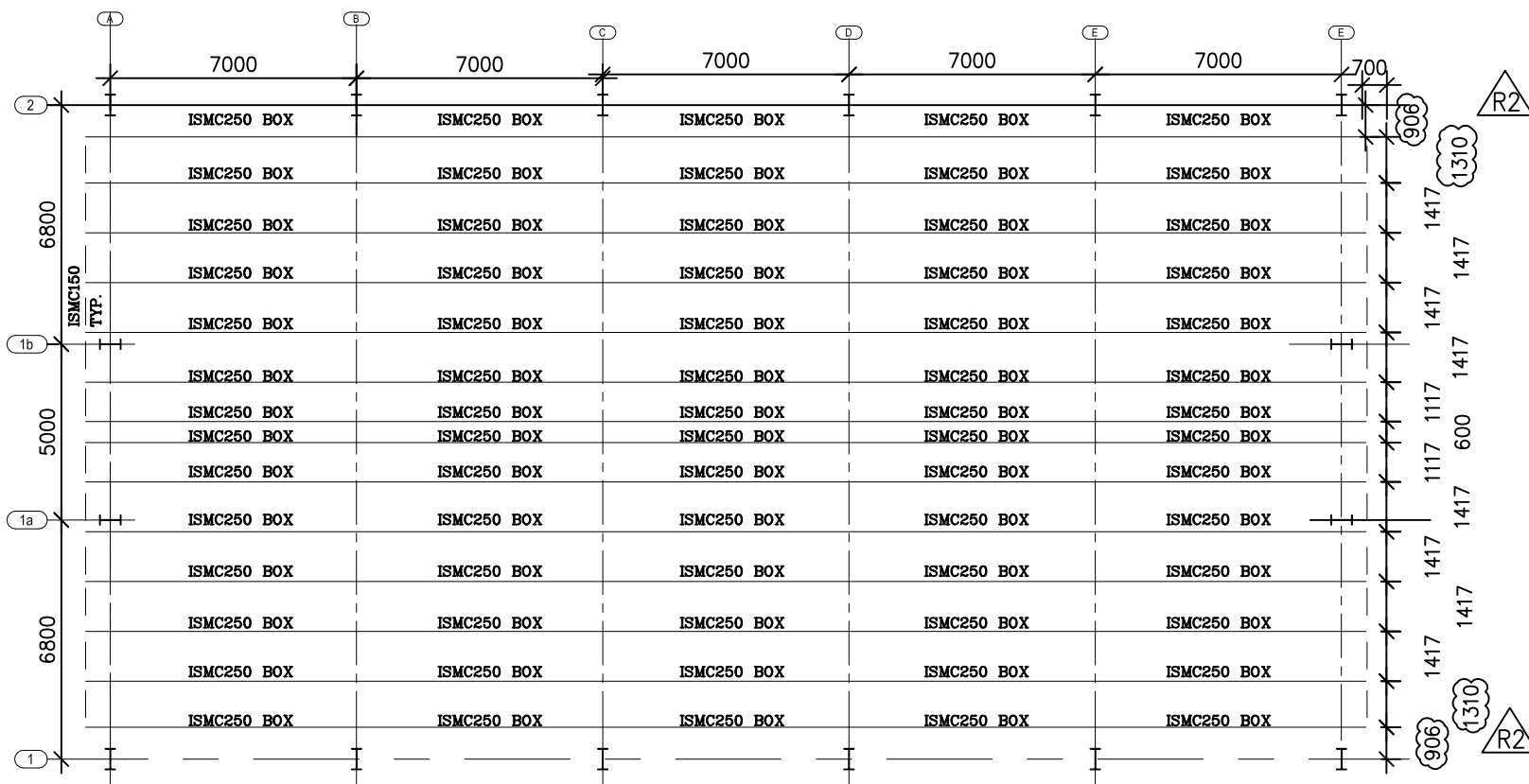
FRAMING ELEVATION ON GRID-2



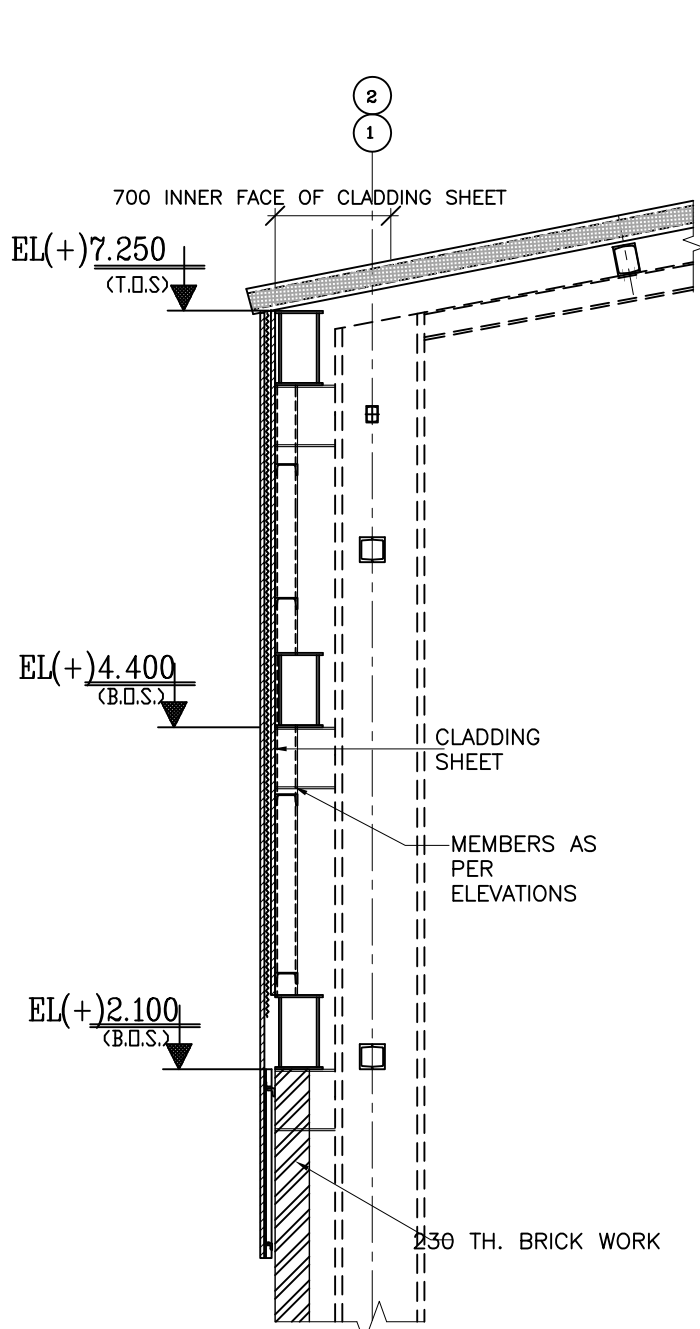
FRAMING ELEVATION ON GRID-A



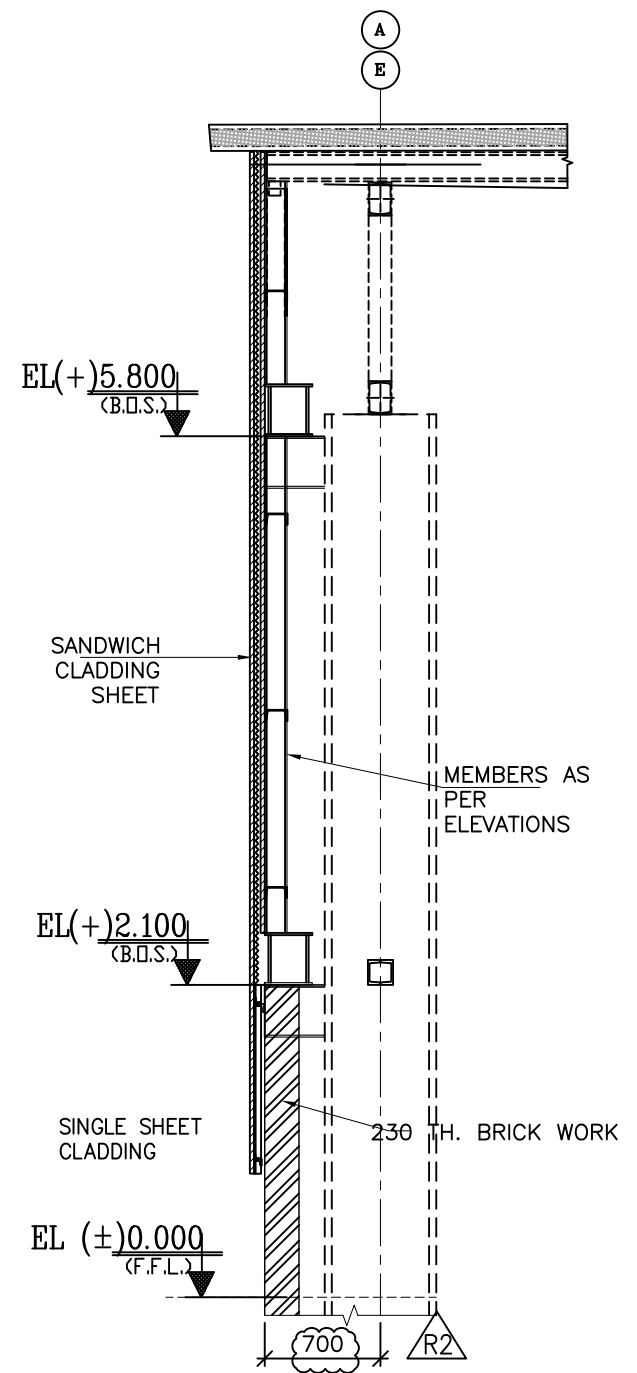
FRAMING ELEVATION ON GRID-F



PLAN AT PURLINS



SECTION 1-1



SECTION 2-2

STRUCTURAL STEEL QUANTITY- 225 MT (APPROX.) FOR SHEET 1 AND 2 ONLY

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
 - ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL(+). 5.600 M.
 - FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MAITREE-00-UTX-LC-100200-PEM.
 - GRADE OF STEEL- E350, CONFIRMING TO SA/IS-2062.
 - CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
 - SPLICING, WELDS AND END CONNECTIONS SHALL BE AS PER SPECIFICATIONS.
 - ALL SITE CONNECTIONS SHALL BE BOLTED TYPE
- REFERENCE DRAWINGS :-
- MAITREE-00-UST-LC-100545-PEM - OVERHAUL WORKSHOP - DETAILS OF SUPER STRUCTURE
 - MAITREE-00-MA-LD-421100M001PEM-C - PLOT PLAN
 - MAITREE-00

LEGEND :

- CL = CENTRE LINE
- EL = ELEVATION
- T.O.C. = TOP OF CONCRETE
- TYP = TYPICAL
- MC = MOMENT CONNECTION
- T.O.S. = TOP OF STEEL
- B.O.S. = BOTTOM OF STEEL
- N.T.S. = NOT TO SCALE
- T.O.COL. = TOP OF COLUMN

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)

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ISSUED BY

NAME SACHIN PANDIT

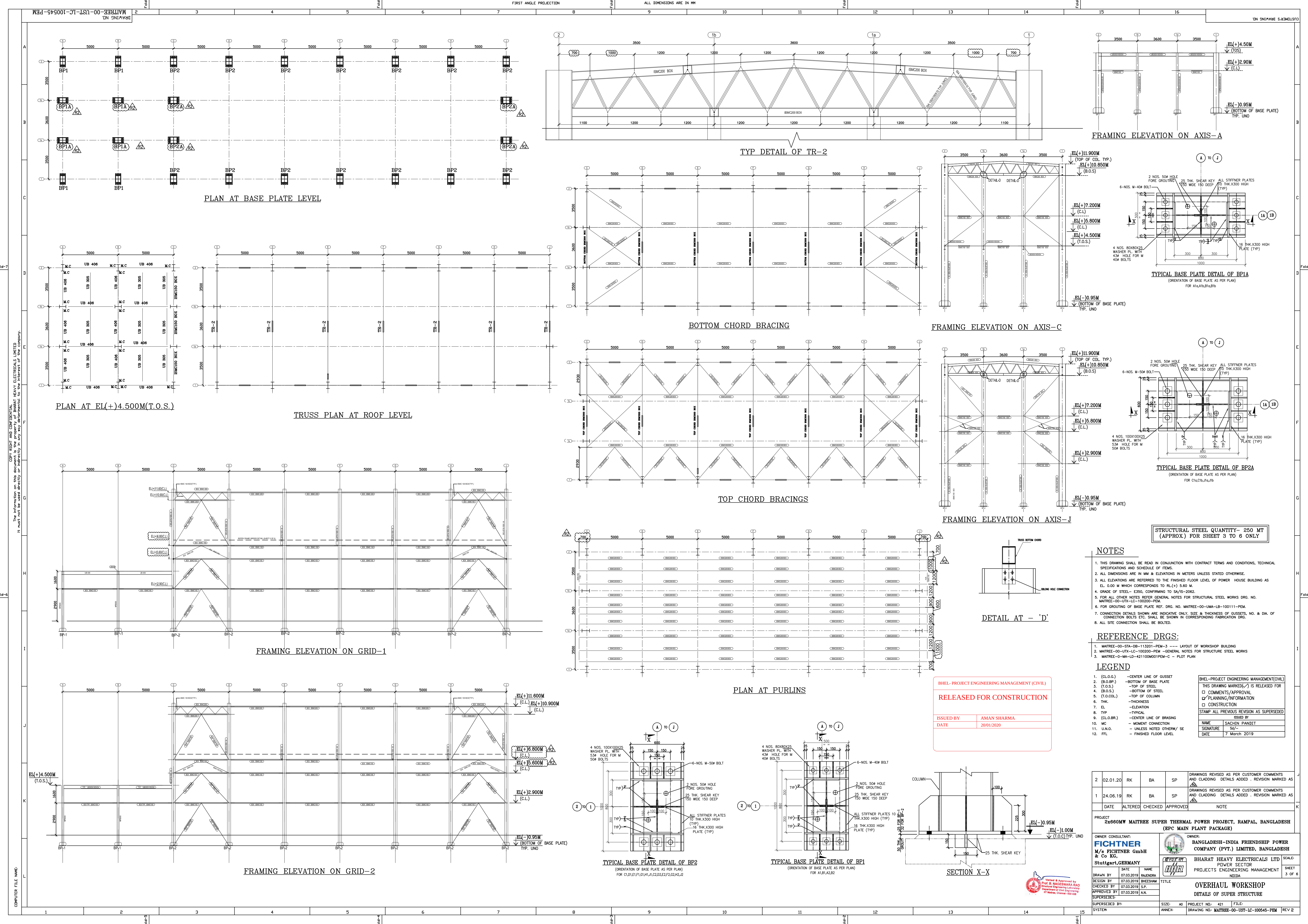
SIGNATURE Sd/-

DATE 2 January 2020

SCHEDULE OF MEMBERS

BEAM MKD.	BEAM SECTION	SHAPE
1CB1	ISMC 150	
1CB2	ISMC 100	
2CB1	ISMC BOX 150	
2CB2	ISMC BOX 200	
2CB3	ISMC BOX 100	
3CB1	① - 250X20 THK. ② - 460X20 THK.	
BKT-1	UB 457	
BKT-2	NPB 500	

2	02.01.20	RK	BA	SP	DRAWINGS REVISED AS PER CUSTOMER COMMENTS AND CLADDING DETAILS ADDED . REVISION MARKED AS
1	24.06.19	RK	BA	SP	DRAWINGS REVISED AS PER CUSTOMER COMMENTS AND CLADDING DETAILS ADDED . REVISION MARKED AS
DATE		ALTERED	CHECKED	APPROVED	NOTE
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY			OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH		
DRAWN BY 20.06.2019 CHECKED BY 20.06.2019 APPROVED BY 20.06.2019 SUPERSEDED BY:			NAME SACHIN PANDIT SIGNATURE Sd/- DATE 2 January 2020		
DATE 20.06.2019 20.06.2019 20.06.2019			NAME RAJENDRA BHEESHM S.P. A.N.		
TITLE VEHICLE WORKSHOP DETAILS OF SUPER STRUCTURE			SCALE SHEET 2 OF 6		
SIZE: A1 PROJECT NO.: 421 FILE:			ANNEXI DRAWING NO. MAITREE-00-UST-LC-100545-PEM REV 2		



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COMPUTED FILE NAME: C:\Users\BHEL\Documents\BH&L-PROJECT ENGINEERING MANAGEMENT (CIVIL)\2x660MW MATREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)\STRUCTURE\STEEL\2x660MW MATREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)_STEEL.dwg

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
RELEASED FOR CONSTRUCTION
ISSUED BY: AMAN SHARMA
DATE: 20/01/2020

STRUCTURAL STEEL QUANTITY- 250 MT (APPROX) FOR SHEET 3 TO 6 ONLY

- NOTES**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
 - ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL(+). 5.60 M.
 - GRADE OF STEEL- E350, CONFORMING TO S&S-2082.
 - FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MATREE-00-UTX-LC-100200-PEN.
 - FOR GROUTING OF BASE PLATE REF. DRG. NO. MATREE-00-UMA-LB-100111-PEN.
 - CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
 - ALL SITE CONNECTION SHALL BE BOLTED.

- REFERENCE DRGS:**
- MATREE-00-STA-DB-113201-PEN-3 --- LAYOUT OF WORKSHOP BUILDING
 - MATREE-00-UTX-LC-100200-PEN --- GENERAL NOTES FOR STRUCTURE STEEL WORKS
 - MATREE-00-MA-LD-421100M01PEN-C --- PLOT PLAN

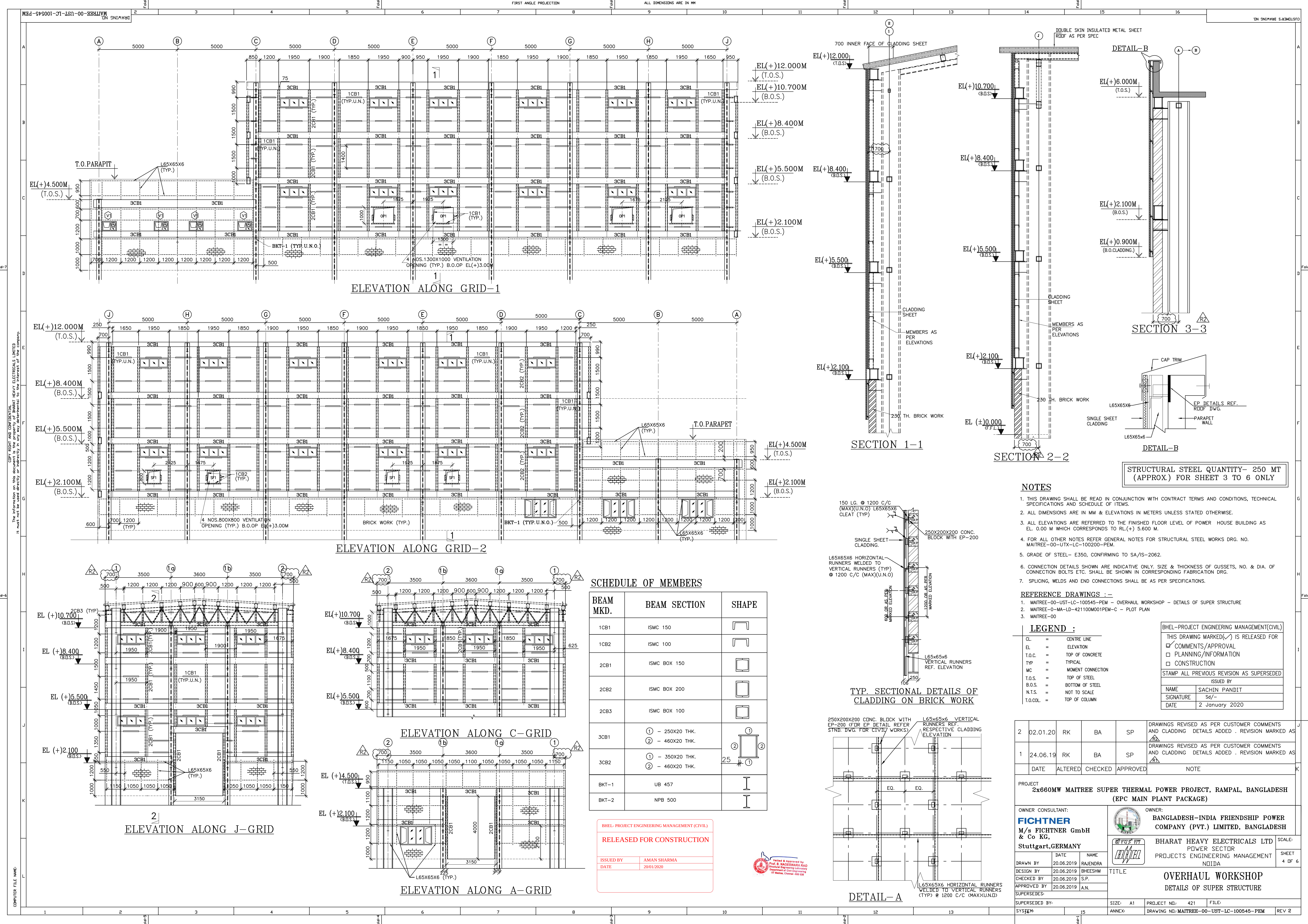
LEGEND

1. (C.L.O.G.)	-CENTER LINE OF GUSSET
2. (B.O.BP.)	-BOTTOM OF BASE PLATE
3. (T.O.S.)	-TOP OF STEEL
4. (B.O.S.)	-BOTTOM OF STEEL
5. (T.O.COL.)	-TOP OF COLUMN
6. THK.	-THICKNESS
7. EL.	-ELEVATION
8. TYP.	-TYPICAL
9. (C.L.O.BR.)	-CENTER LINE OF BRACING
10. MC	- MOMENT CONNECTION
11. U.N.O.	- UNLESS NOTED OTHERWISE/ SE
12. FFL	- FINISHED FLOOR LEVEL

Stamp and Signature:

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
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□ PLANNING/ INFORMATION
□ CONSTRUCTION
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ISSUED BY: SACHIN PANDIT
SIGNATURE: Sd/-
DATE: 7 March 2019

2	02.01.20	RK	BA	SP	DRAWINGS REVISED AS PER CUSTOMER COMMENTS AND CLADDING DETAILS ADDED . REVISION MARKED AS
1	24.06.19	RK	BA	SP	DRAWINGS REVISED AS PER CUSTOMER COMMENTS AND CLADDING DETAILS ADDED . REVISION MARKED AS
DATE	ALTERED	CHECKED	APPROVED	NOTE	
PROJECT 2x660MW MATREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart, GERMANY					
OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NEDA					
DRAWN BY: 07.03.2019 BHEESHAM DESIGN BY: 07.03.2019 BHEESHAM CHECKED BY: 07.03.2019 S.P. APPROVED BY: 07.03.2019 AN. SUPERSEDED BY:					
TITLE OVERHAUL WORKSHOP DETAILS OF SUPER STRUCTURE					
SIZE: A0	PROJECT NO.: 421	FILE	ANEX:	DRAWING NO.: MATREE-00-UTX-LC-100545-PEN	REV 2
SYSTEM:					



ELEVATION ALONG GRID-1

ELEVATION ALONG GRID-2

ELEVATION ALONG C-GRID

ELEVATION ALONG J-GRID

ELEVATION ALONG A-GRID

SECTION 1-1

SECTION 2-2

SECTION 3-3

DETAIL-B

STRUCTURAL STEEL QUANTITY- 250 MT (APPROX.) FOR SHEET 3 TO 6 ONLY

SCHEDULE OF MEMBERS

BEAM MKD.	BEAM SECTION	SHAPE
1CB1	ISM 150	
1CB2	ISM 100	
2CB1	ISM BOX 150	
2CB2	ISM BOX 200	
2CB3	ISM BOX 100	
3CB1	① - 250X20 THK. ② - 460X20 THK.	
3CB2	① - 350X20 THK. ② - 460X20 THK.	
BKT-1	UB 457	
BKT-2	NPB 500	

TYP. SECTIONAL DETAILS OF CLADDING ON BRICK WORK

DETAIL-A

NOTES

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- FOR ALL OTHER NOTES REFER GENERAL NOTES FOR STRUCTURAL STEEL WORKS DRG. NO. MAITREE-00-UTX-LC-100200-PEM.
- GRADE OF STEEL- E350, CONFIRMING TO SA/IS-2062.
- CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- SPLICING, WELDS AND END CONNECTIONS SHALL BE AS PER SPECIFICATIONS.

REFERENCE DRAWINGS :-

- MAITREE-00-UTX-LC-100545-PEM - OVERHAUL WORKSHOP - DETAILS OF SUPER STRUCTURE
- MAITREE-0-MA-LD-421100M001PEM-C - PLOT PLAN
- MAITREE-00

LEGEND :

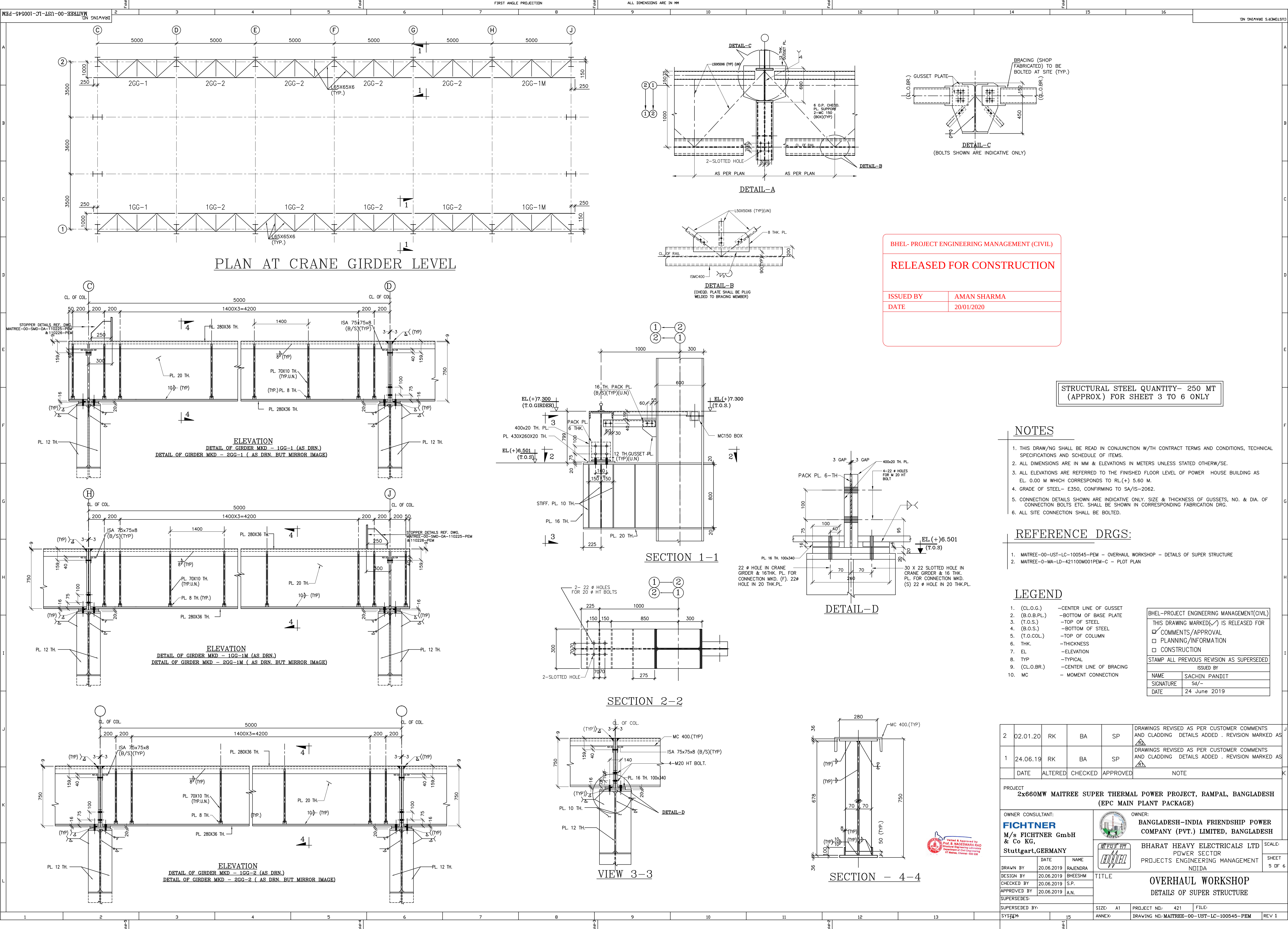
CL	=	CENTRE LINE
EL	=	ELEVATION
T.O.C.	=	TOP OF CONCRETE
TYP	=	TYPICAL
MC	=	MOMENT CONNECTION
T.O.S.	=	TOP OF STEEL
B.O.S.	=	BOTTOM OF STEEL
N.T.S.	=	NOT TO SCALE
T.O.COL	=	TOP OF COLUMN

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)	
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□ CONSTRUCTION	
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ISSUED BY	
NAME	SACHIN PANDIT
SIGNATURE	Sa/-
DATE	2 January 2020

2	02.01.20	RK	BA	SP	DRAWINGS REVISED AS PER CUSTOMER COMMENTS AND CLADDING DETAILS ADDED . REVISION MARKED AS
1	24.06.19	RK	BA	SP	DRAWINGS REVISED AS PER CUSTOMER COMMENTS AND CLADDING DETAILS ADDED . REVISION MARKED AS
DATE ALTERED CHECKED APPROVED					NOTE
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT:			OWNER:		
FICHTNER			BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH		
M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY			BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT Noida		
DRAWN BY	DATE	NAME	TITLE		
DESIGN BY	20.06.2019	RAJENDRA	OVERHAUL WORKSHOP		
CHECKED BY	20.06.2019	BHEESHM	DETAILS OF SUPER STRUCTURE		
APPROVED BY	20.06.2019	S.P.	SCALE:		
SUPERSEDED BY:	20.06.2019	A.N.	SHEET 4 OF 6		
SIZE: A1			PROJECT NO: 421		
ANNEX:			FILE:		
DRAWING NO: MAITREE-00-UST-LC-100545-PEM			REV 2		

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)
RELEASED FOR CONSTRUCTION
ISSUED BY AMAN SHARMA
DATE 20/01/2020





BHEL- PROJECT ENGINEERING MANAGEMENT (CIVIL)

RELEASED FOR CONSTRUCTION

ISSUED BY AMAN SHARMA

DATE 20/01/2020

STRUCTURAL STEEL QUANTITY- 250 MT (APPROX.) FOR SHEET 3 TO 6 ONLY

NOTES

- THIS DRAW/NG SHALL BE READ IN CONJUNCTION W/TH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERW/SE.
- ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL.(+) 5.60 M.
- GRADE OF STEEL- E350, CONFIRMING TO SA/S-2062.
- CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- ALL SITE CONNECTION SHALL BE BOLTED.

REFERENCE DRGS:

- MAITREE-00-UST-LC-100545-PEM - OVERHAUL WORKSHOP - DETAILS OF SUPER STRUCTURE
- MAITREE-0-MD-LD-421100M001PEM-C - PLOT PLAN

LEGEND

- (C.L.O.G.) -CENTER LINE OF GUSSET
- (B.O.B.PL.) -BOTTOM OF BASE PLATE
- (T.O.S.) -TOP OF STEEL
- (B.O.S.) -BOTTOM OF STEEL
- (T.O.COL.) -TOP OF COLUMN
- THK. -THICKNESS
- EL. -ELEVATION
- TYP. -TYPICAL
- (C.L.O.BR.) -CENTER LINE OF BRACING
- MC - MOMENT CONNECTION

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)

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□ PLANNING/INFORMATION

□ CONSTRUCTION

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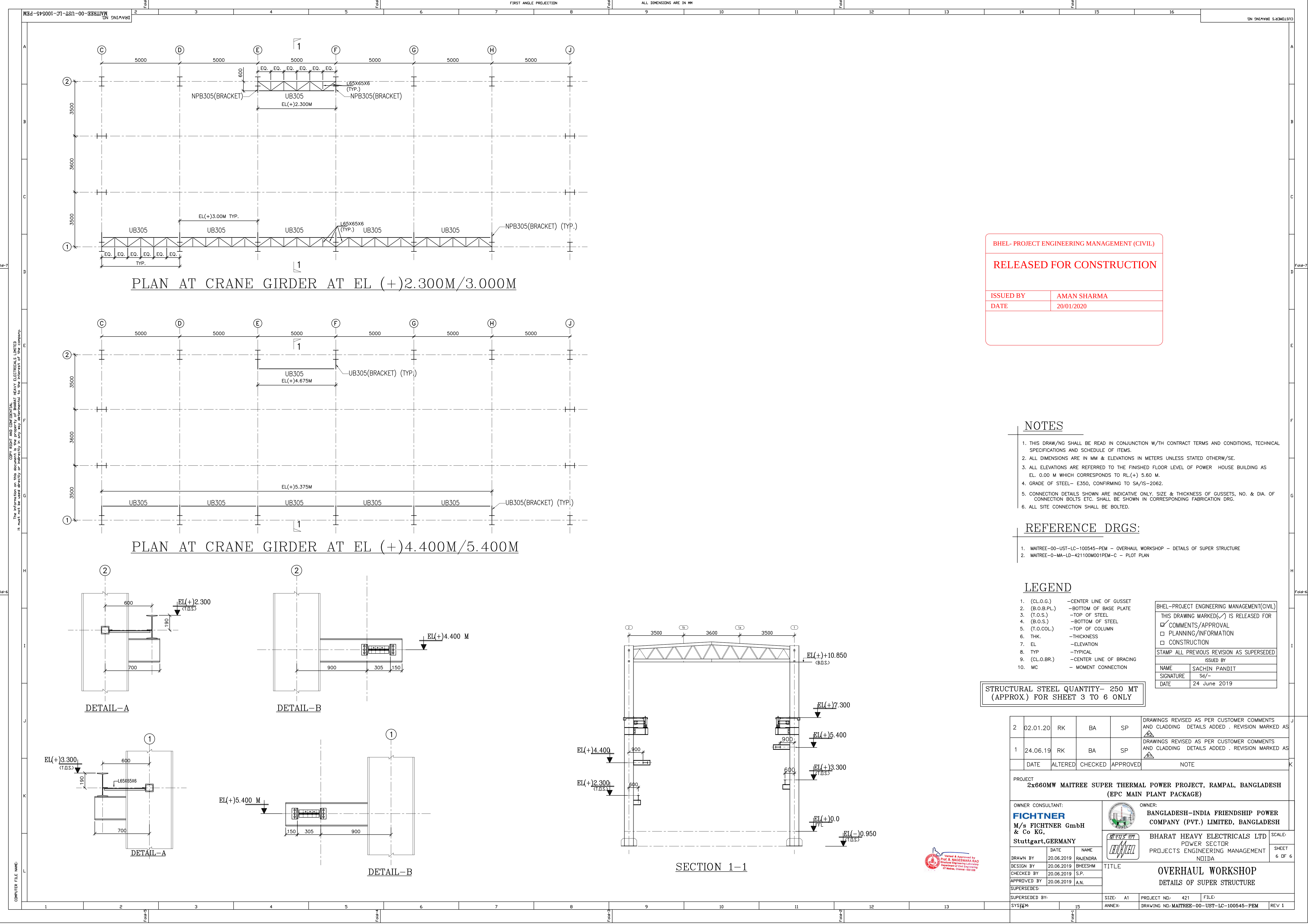
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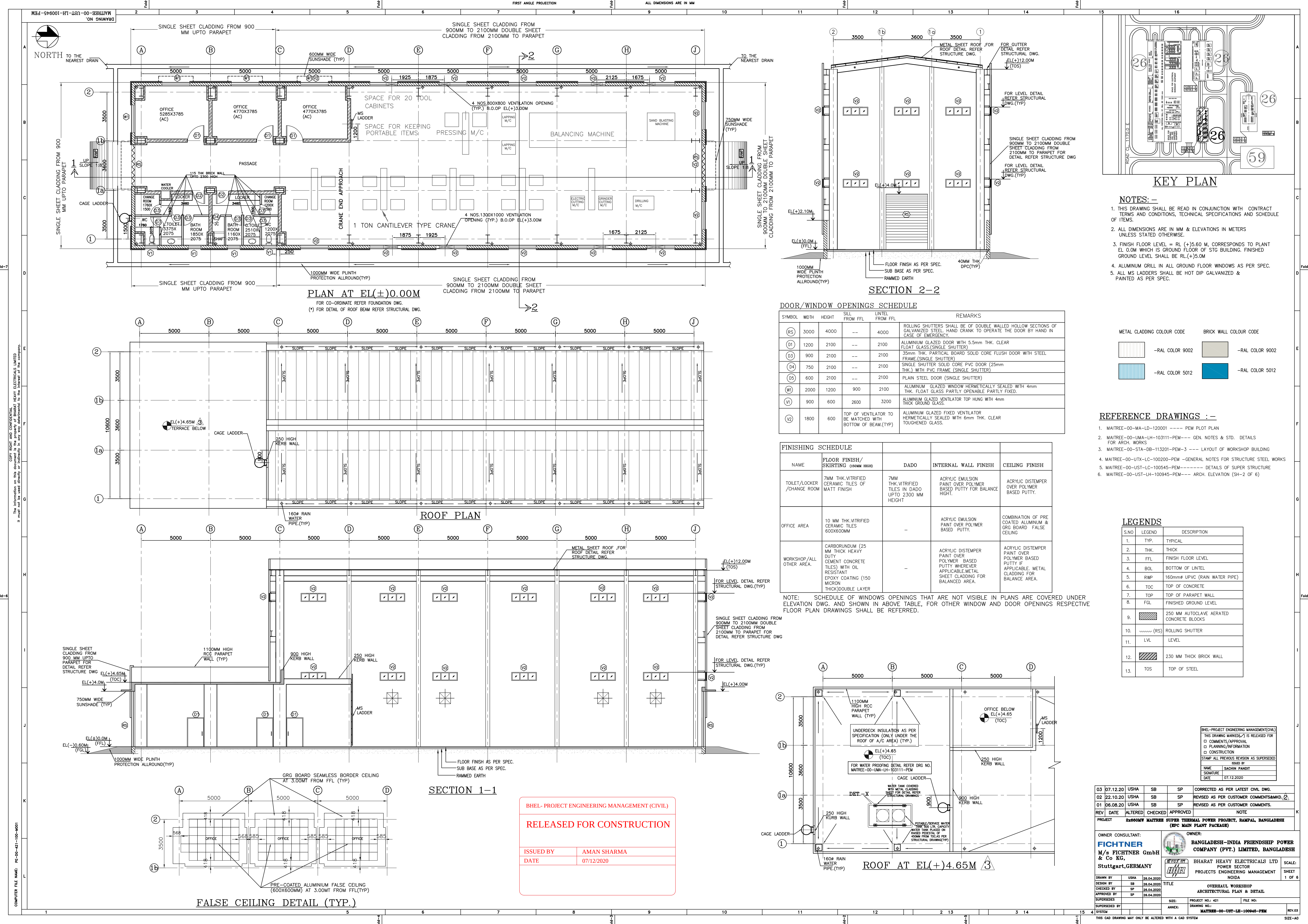
NAME SACHIN PANDIT

SIGNATURE SA/-

DATE 24 June 2019

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1	24.06.19	RK	BA	SP	DRAWINGS REVISED AS PER CUSTOMER COMMENTS AND CLADDING DETAILS ADDED . REVISION MARKED AS
DATE ALTERED CHECKED APPROVED					NOTE
PROJECT 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER CONSULTANT: FICHTNER M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY			OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH		
DRAWN BY DATE 20.06.2019 NAME RAJENDRA			Bharat Heavy Electricals Ltd Power Sector Projects Engineering Management Noida		
DESIGN BY DATE 20.06.2019 NAME BHEESHM			TITLE OVERHAUL WORKSHOP DETAILS OF SUPER STRUCTURE		
CHECKED BY DATE 20.06.2019 S.P.			SHEET 5 OF 6		
APPROVED BY DATE 20.06.2019 A.N.			REV 1		
SUPERSEDED BY:			SIZE: A1 PROJECT NO: 421 FILE:		
SYSTEM			ANNEX: DRAWING NO: MAITREE-00-UST-LC-100545-PEM		





KEY PLAN

NOTES:-

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL. 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL (+)5.0M
- ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.
- ALL MS LADDERS SHALL BE HOT DIP GALVANIZED & PAINTED AS PER SPEC.

SYMBOL	WIDTH	HEIGHT	SILL FROM FFL	LINTEL FROM FFL	REMARKS
(RS)	3000	4000	---	4000	ROLLING SHUTTERS SHALL BE OF DOUBLE WALLED HOLLOW SECTIONS OF GALVANIZED STEEL. HAND CRANK TO OPERATE THE DOOR BY HAND IN CASE OF EMERGENCY.
(D1)	1200	2100	---	2100	ALUMINUM GLAZED DOOR WITH 5.5mm THK. CLEAR FLOAT GLASS (SINGLE SHUTTER)
(D3)	900	2100	---	2100	35mm THK. PARTIAL BOARD SOLID CORE FLUSH DOOR WITH STEEL FRAME (SINGLE SHUTTER)
(D4)	750	2100	---	2100	SINGLE SHUTTER SOLID CORE PVC DOOR (25mm THK.) WITH PVC FRAME (SINGLE SHUTTER)
(D5)	600	2100	---	2100	PLAIN STEEL DOOR (SINGLE SHUTTER)
(W)	2000	1200	900	2100	ALUMINUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS PARTLY OPENABLE PARTLY FIXED.
(V1)	900	600	2600	3200	ALUMINUM GLAZED VENTILATOR TOP HUNG WITH 4mm THICK GROUND GLASS.
(V2)	1800	600	---	---	TOP OF VENTILATOR TO BE MATCHED WITH BOTTOM OF BEAM (TYP)
					ALUMINUM GLAZED FIXED VENTILATOR HERMETICALLY SEALED WITH 6mm THK. CLEAR TOUGHENED GLASS.

METAL CLADDING COLOUR CODE	BRICK WALL COLOUR CODE
-RAL COLOR 9002	-RAL COLOR 9002
-RAL COLOR 5012	-RAL COLOR 5012

REFERENCE DRAWINGS :-

- MAITREE-00-MA-LD-120001 - P&M PLOT PLAN
- MAITREE-00-UMA-LH-103111-PEM - GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
- MAITREE-00-STA-DB-113201-PEM-3 - LAYOUT OF WORKSHOP BUILDING
- MAITREE-00-UTX-LC-100200-PEM - GENERAL NOTES FOR STRUCTURE STEEL WORKS
- MAITREE-00-UST-LC-100545-PEM - DETAILS OF SUPER STRUCTURE
- MAITREE-00-UST-LH-100945-PEM - ARCH. ELEVATION (SH-2 OF 6)

LEGENDS

S.NO	LEGEND	DESCRIPTION
1.	TYP.	TYPICAL
2.	THK.	THICK
3.	FFL	FINISH FLOOR LEVEL
4.	BOL	BOTTOM OF LINTEL
5.	RWP	160mm UPVC (RAIN WATER PIPE)
6.	TOC	TOP OF CONCRETE
7.	TOP	TOP OF PARAPET WALL
8.	FGL	FINISHED GROUND LEVEL
9.		250 MM AUTOCLAVE AERATED CONCRETE BLOCKS
10.	(RS)	ROLLING SHUTTER
11.	LVL	LEVEL
12.		230 MM THICK BRICK WALL
13.	TOS	TOP OF STEEL

BHEL-PROJECT ENGINEERING MANAGEMENT (CIVIL)			
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☐ COMMENTS/ APPROVAL			
☐ PLANNING/ INFORMATION			
☐ CONSTRUCTION			
STAMP ALL PREVIOUS REVISION AS SUPERSEDED			
NAME	ISSUED BY	DATE	
SIGNATURE	SACHIN PANDEY	07.12.2020	

03	07.12.20	USHA	SB	SP	CORRECTED AS PER LATEST CIVIL DWG.
02	22.10.20	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS&M.D.
01	06.08.20	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS.
REV	DATE	ALTERED	CHECKED	APPROVED	NOTE

OWNER CONSULTANT:				OWNER:			
M/s FICHTNER GmbH & Co KG, Stuttgart, GERMANY				BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH			
Bharat Heavy Electricals Ltd, Projects Engineering Management, NOIDA				Bharat Heavy Electricals Ltd, Projects Engineering Management, NOIDA			
DRAWN BY: USHA				TITLE: OVERHAUL WORKSHOP ARCHITECTURAL PLAN & DETAIL			
DESIGN BY: SB				PROJECT NO.: 421			
CHECKED BY: SP				FILE NO.:			
APPROVED BY: SP				ANNEX: DRAWING NO.:			
SUPERSEDES: NONE				REVISION: 03			
SUPERSEDED BY: NONE				THIS CAD DRAWING MAY ONLY BE ALTERED WITH A CAD SYSTEM			

BHEL- PROJECT ENGINEERING MANAGEMENT (CIVIL)

RELEASED FOR CONSTRUCTION

ISSUED BY	AMAN SHARMA
DATE	07/12/2020

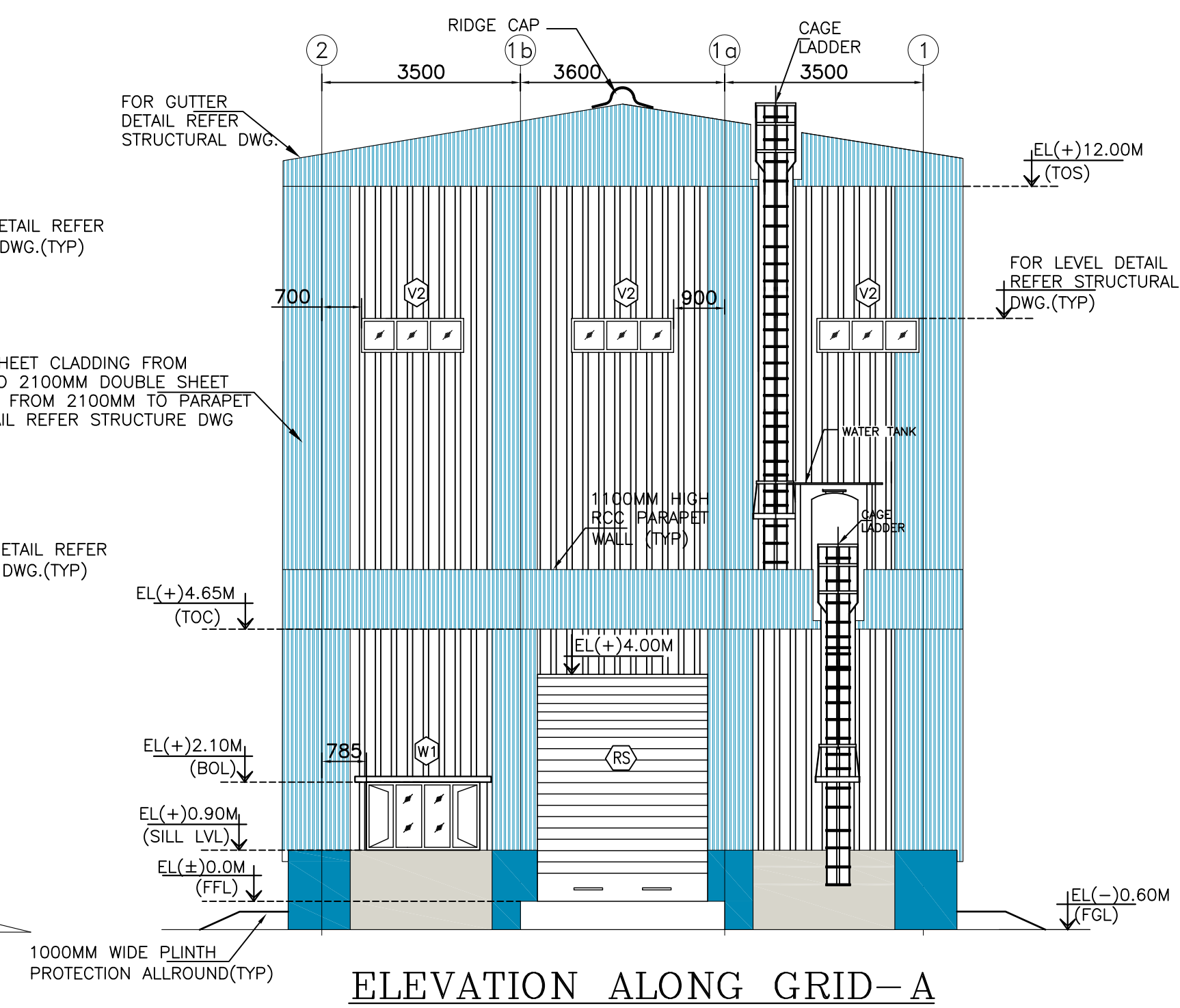
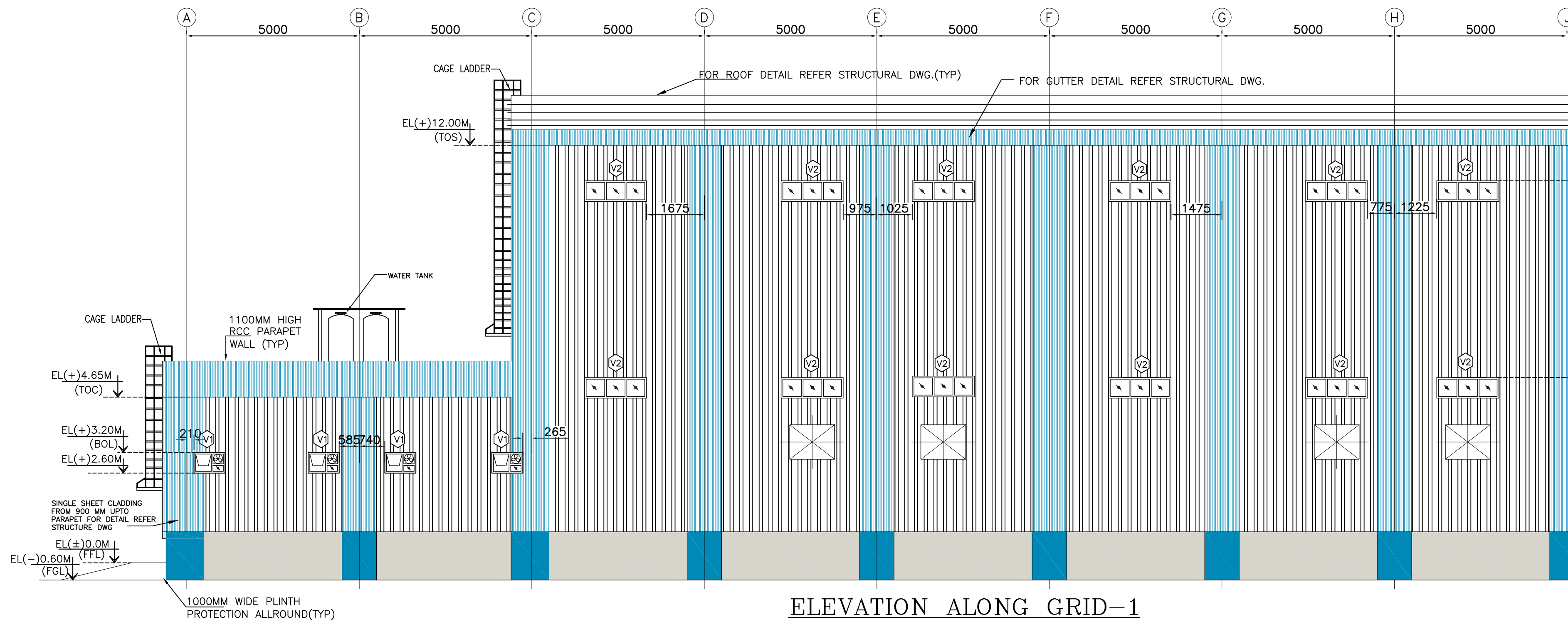
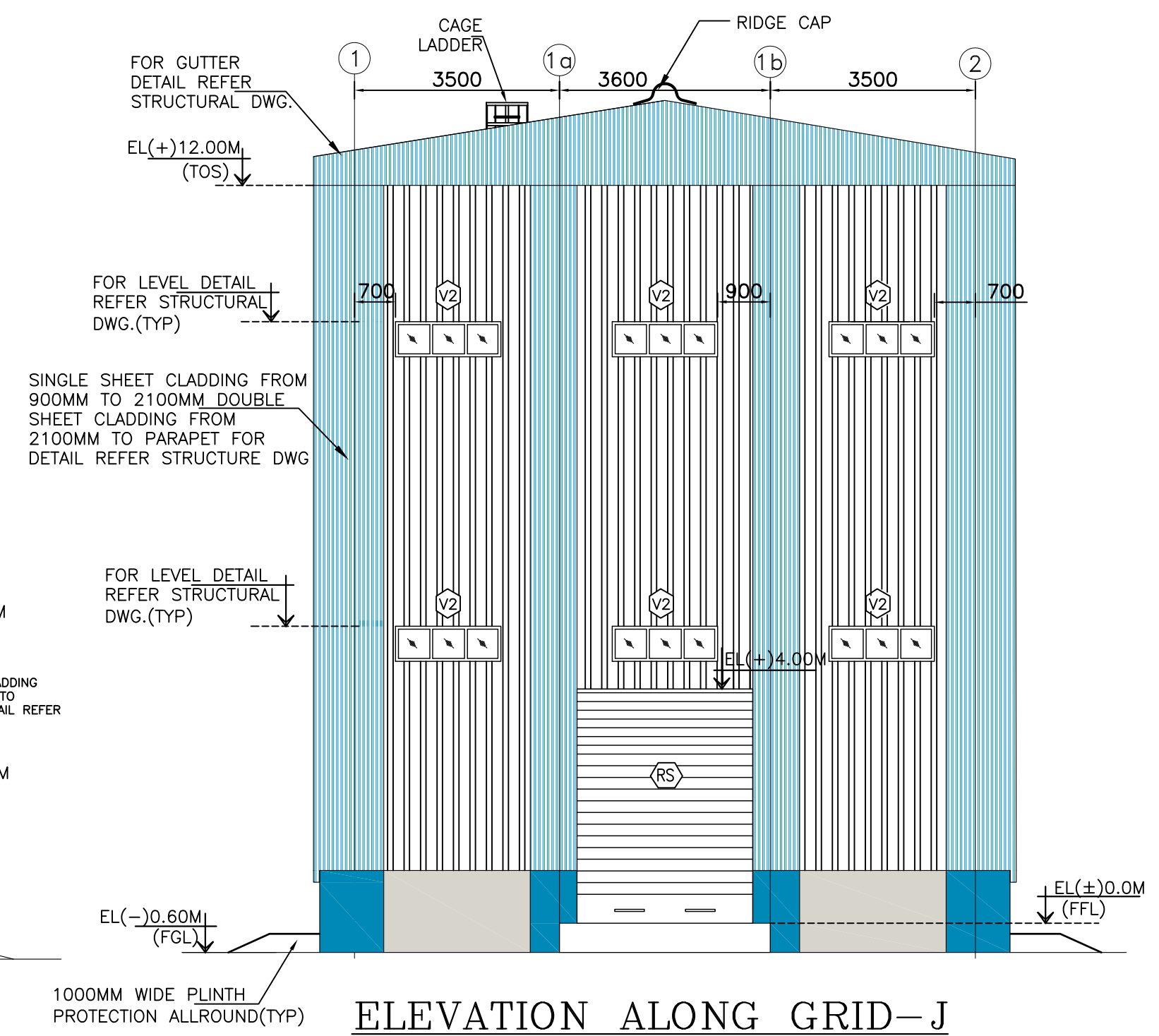
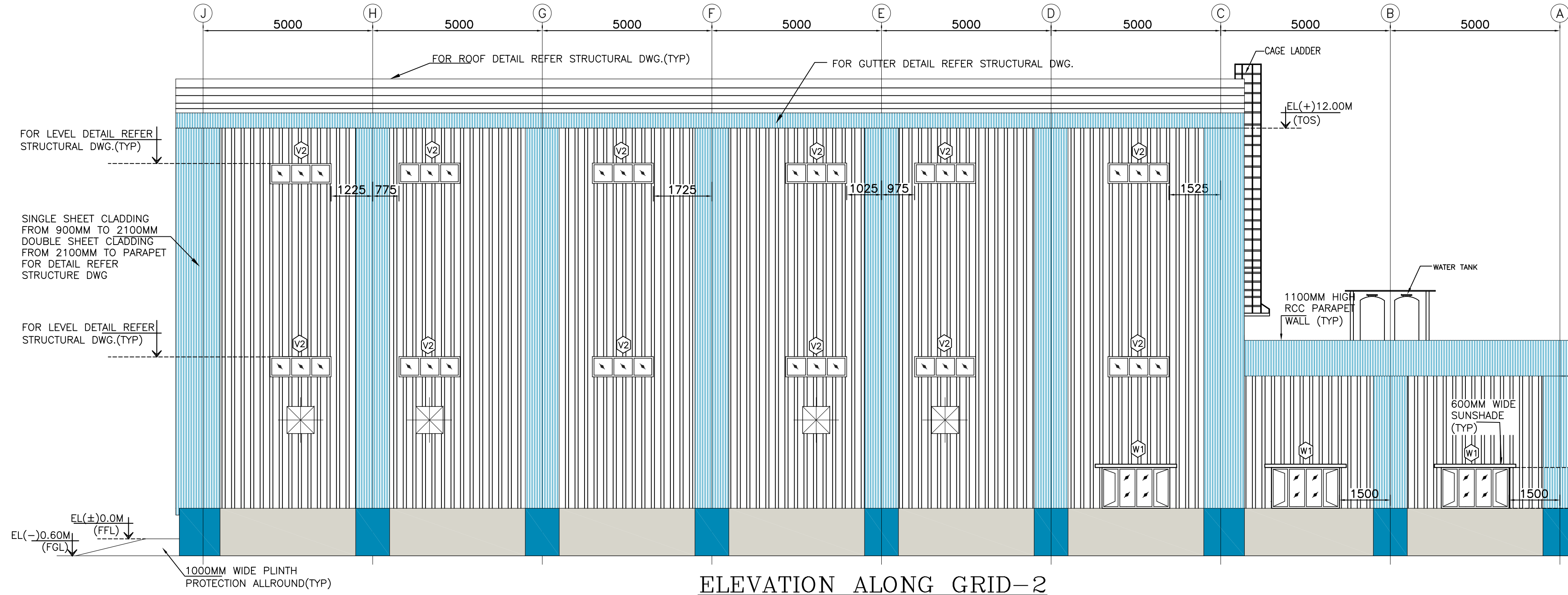


NORTH

FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN MM

MAITREE-00-UST-LH-100945-PEM
RELEASED FOR CONSTRUCTION
ISSUED BY: AMAN SHARMA
DATE: 07/12/2020



(*) 330# WALL OPENING FOR EXHAUST FAN TOP OF OPENING TO BE MATCHED WITH BOTTOM OF LINTEL BEAM.(TYP)

NOTES: -

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
- FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLAN EL 0.0M WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL (+)5.0M
- ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.
- ALL MS LADDERS SHALL BE HOT DIP GALVANIZED & PAINTED AS PER SPEC.

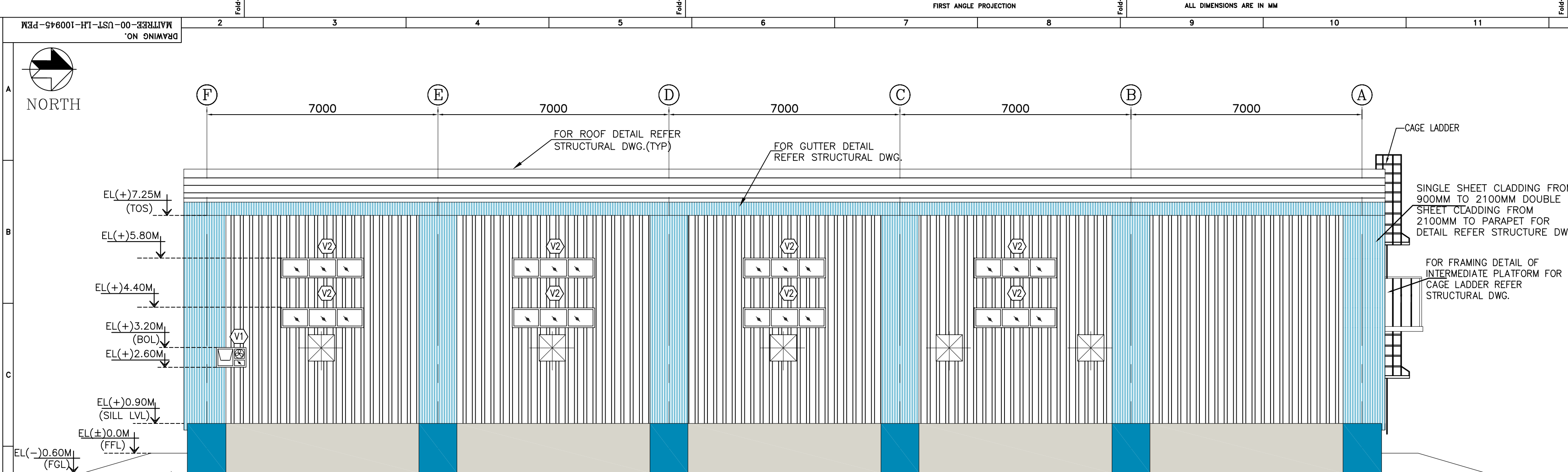
METAL CLADDING COLOUR CODE	BRICK WALL COLOUR CODE
-RAL COLOR 9002	-RAL COLOR 9002
-RAL COLOR 5012	-RAL COLOR 5012

REFERENCE DRAWINGS :-

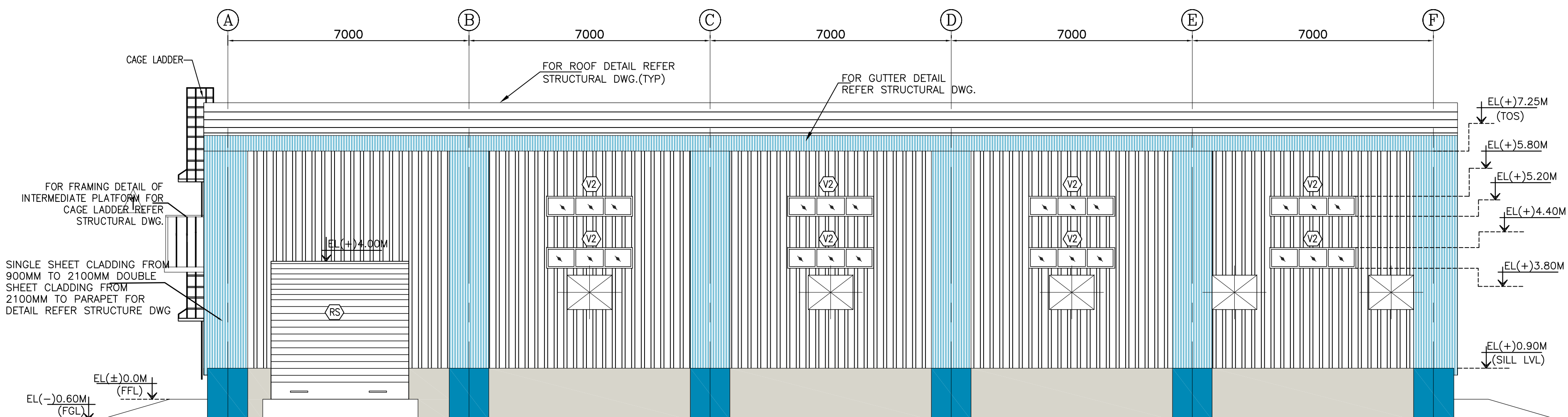
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- MAITREE-00-UMA-LH-103111-PEM--- GEN. NOTES & STD. DETAILS FOR ARCH. WORKS
- MAITREE-00-STA-DB-113201-PEM-3 ---- LAYOUT OF WORKSHOP BUILDING
- MAITREE-00-UTX-LC-100200-PEM -GENERAL NOTES FOR STRUCTURE STEEL WORKS
- MAITREE-00-UST-LC-100545-PEM----- DETAILS OF SUPER STRUCTURE
- MAITREE-00-UST-LH-100945-PEM---- ARCH. PLAN (SH-1 OF 6)

BHEL-PROJECT ENGINEERING MANAGEMENT (PVT.) LTD.			
THIS DRAWING MARKED (✓) IS RELEASED FOR			
□	COMMENTS/REVISION	DATE	BY
□	PLANNING/INFORMATION	26.04.2020	SB
□	CONSTRUCTION	26.04.2020	SP
STAMP ALL PREVIOUS REVISIONS AS SUPERSEDED			
ISSUED BY			
NAME	SACHIN PANDIT	DATE	07.12.2020
SIGNATURE			

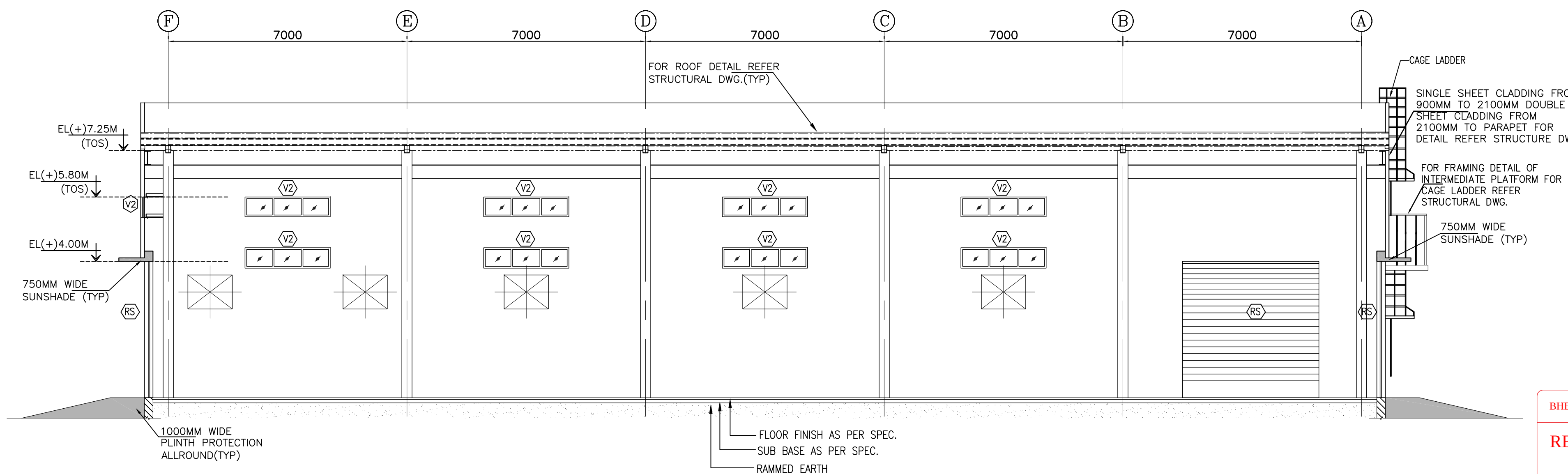
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02.22.10.20	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS&M&K
01.08.08.20	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS
REV	DATE	ALTERED	CHECKED	APPROVED
PROJECT 2x600MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (BPC MAIN PLANT PACKAGE)				
OWNER CONSULTANT:		OWNER:		
FICHTNER		BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH		
M/s FICHTNER GmbH & Co KG, Stuttgart, GERMANY		BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA		
DRAWN BY	USHA	26.04.2020	TITLE	OVERHAUL WORKSHOP ARCHITECTURAL ELEVATION
CHECKED BY	SB	26.04.2020	SCALE	2 OF 6
APPROVED BY	SP	26.04.2020	PROJECT NO.	421
SUPERSEDES			DRAWING NO.	MAITREE-00-UST-LH-100945-PEM
SUPERSEDED BY			FILE NO.	
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ELEVATION ALONG GRID-2



ELEVATION ALONG GRID-1



SECTION 1-1

DOOR/WINDOW OPENINGS SCHEDULE

SYMBOL	WIDTH	HEIGHT	SILL FROM FFL	LINTEL FROM FFL	REMARKS
(RS)	4000	4000	--	4000	ROLLING SHUTTERS SHALL BE OF DOUBLE WALLED HOLLOW SECTIONS OF GALVANIZED STEEL, HAND CRANK TO OPERATE THE DOOR BY HAND IN CASE OF EMERGENCY.
(D1)	1200	2100	--	2100	ALUMINIUM GLAZED DOOR WITH 5.5mm THK. CLEAR FLOAT GLASS.(SINGLE SHUTTER)
(D2)	900	2100	--	2100	35mm THK. PARTIAL BOARD SOLID CORE FLUSH DOOR WITH STEEL FRAME.(SINGLE SHUTTER)
(D3)	750	2100	--	2100	SINGLE SHUTTER SOLID CORE PVC DOOR (25mm THK.) WITH PVC FRAME (SINGLE SHUTTER)
(W1)	2000	1200	900	2100	ALUMINUM GLAZED WINDOW HERMETICALLY SEALED WITH 4mm THK. FLOAT GLASS PARTLY OPENABLE PARTLY FIXED.
(V1)	900	600	2600	3200	ALUMINIUM GLAZED VENTILATOR TOP HUNG WITH 4mm THICK GROUND GLASS.
(V2)	1800	600	5200/3800	5800/4400	ALUMINUM GLAZED FIXED VENTILATOR HERMETICALLY SEALED WITH 6mm THK. CLEAR TOUGHENED GLASS.

FINISHING SCHEDULE				
NAME	FLOOR FINISH/ SKIRTING (150MM HIGH)	DADO	INTERNAL WALL FINISH	CEILING FINISH
TOILET	7MM THK.VITRIFIED CERAMIC TILES OF MATT FINISH	7MM THK.VITRIFIED TILES IN DADO UPTO 2300 MM HEIGHT	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY FOR BALANCE HIGHT.	ACRYLIC DISTEMPER OVER POLYMER BASED PUTTY.
OFFICE AREA	10 MM THK.VITRIFIED CERAMIC TILES 600X600MM	—	ACRYLIC EMULSION PAINT OVER POLYMER BASED PUTTY.	COMBINATION OF PR COATED ALUMINUM 4 GRG BOARD FALSE CEILING
WORKSHOP/ALL OTHER AREA.	CARBORUNDUM (25 MM THICK HEAVY DUTY CEMENT CONCRETE TILES) WITH OIL RESISTANT EPOXY COATING (150 MICRON THICK)DOUBLE LAYER	—	ACRYLIC DISTEMPER PAINT OVER POLYMER BASED PUTTY WHEREVER APPLICABLE.METAL SHEET CLADDING FOR BALANCED AREA.	ACRYLIC DISTEMPER PAINT OVER POLYMER BASED PUTTY IF APPLICABLE. METAL CLADDING FOR BALANCE AREA.

NOTE: SCHEDULE OF WINDOWS OPENINGS THAT ARE NOT VISIBLE IN PLANS ARE COVERED UNDER ELEVATION DWG. AND SHOWN IN ABOVE TABLE, FOR OTHER WINDOW AND DOOR OPENINGS RESPECTIVE FLOOR PLAN DRAWINGS SHALL BE REFERRED.

NOTES: —

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
3. FINISH FLOOR LEVEL = RL (+)5.60 M, CORRESPONDS TO PLANT EL 0.00 WHICH IS GROUND FLOOR OF STG BUILDING. FINISHED GROUND LEVEL SHALL BE RL (+)5.00M
4. ALUMINUM GRILL IN ALL GROUND FLOOR WINDOWS AS PER SPEC.
5. ALL MS LADDERS SHALL BE HOT DIP GALVANIZED & PAINTED AS PER SPEC.

REFERENCE DRAWINGS :-

1. MAITREE-00-MA-LD-120001 ----- PEM PLOT PLAN
2. MAITREE-00-UWA-LH-103111-PEM--- GEN. NOTES & STD. DETAILS
FOR ARCH. WORKS
3. MAITREE-00-STA-DB-113201-PEM-3 --- LAYOUT OF WORKSHOP BUILDING
4. MAITREE-00-UTX-LC-100200-PEM -GENERAL NOTES FOR STRUCTURE STEEL WORKS
5. MAITREE-00-UST-LC-100545-PEM----- DETAILS OF SUPER STRUCTURE
6. MAITREE-00-UST-LH-100945-PEM----- ARCH. PLAN (SH-3 OF 6)

BHEL- PROJECT ENGINEERING MANAGEMENT (CIVIL)

RELEASED FOR CONSTRUCTION

ISSUED BY	AMAN SHARMA
DATE	07/12/2020

BHEL—PROJECT ENGINEERING MANAGEMENT(C	
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☐ COMMENTS/APPROVAL ☐ PLANNING/INFORMATION ☐ CONSTRUCTION	
STAMP ALL PREVIOUS REVISION AS SUPERSE	
ISSUED BY	
NAME	SACHIN PANDIT
SIGNATURE	
DATE	07.12.2020

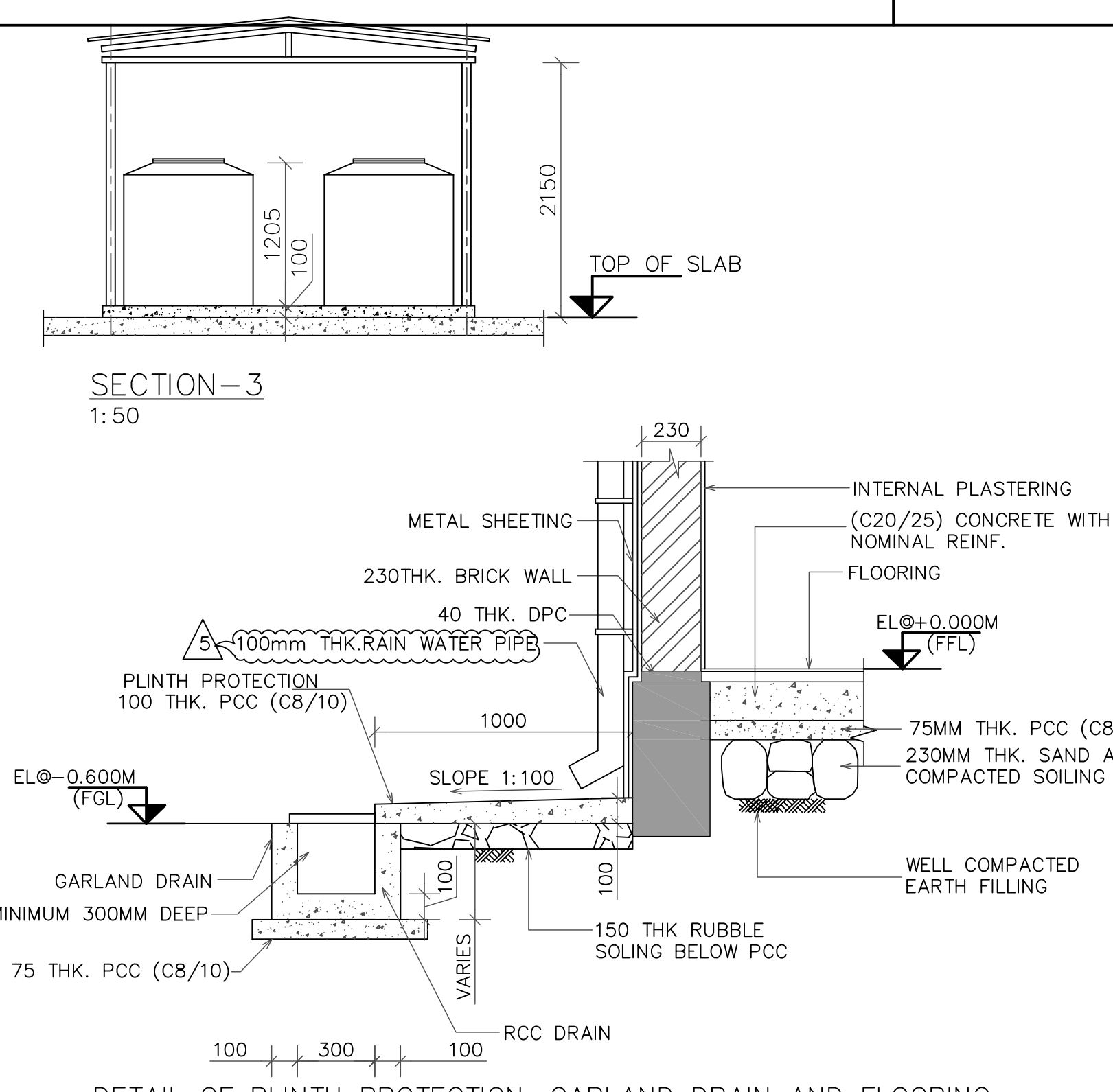
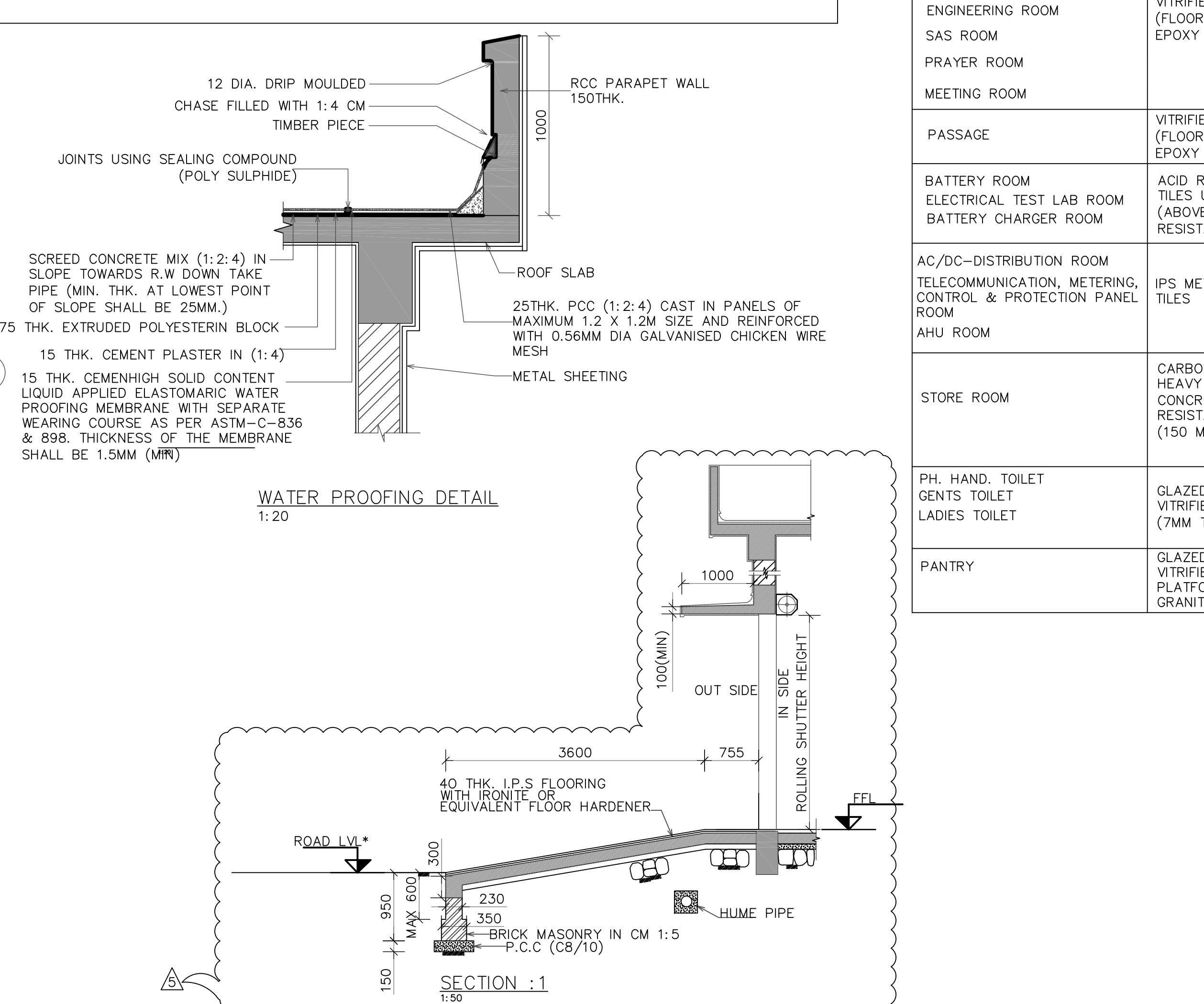
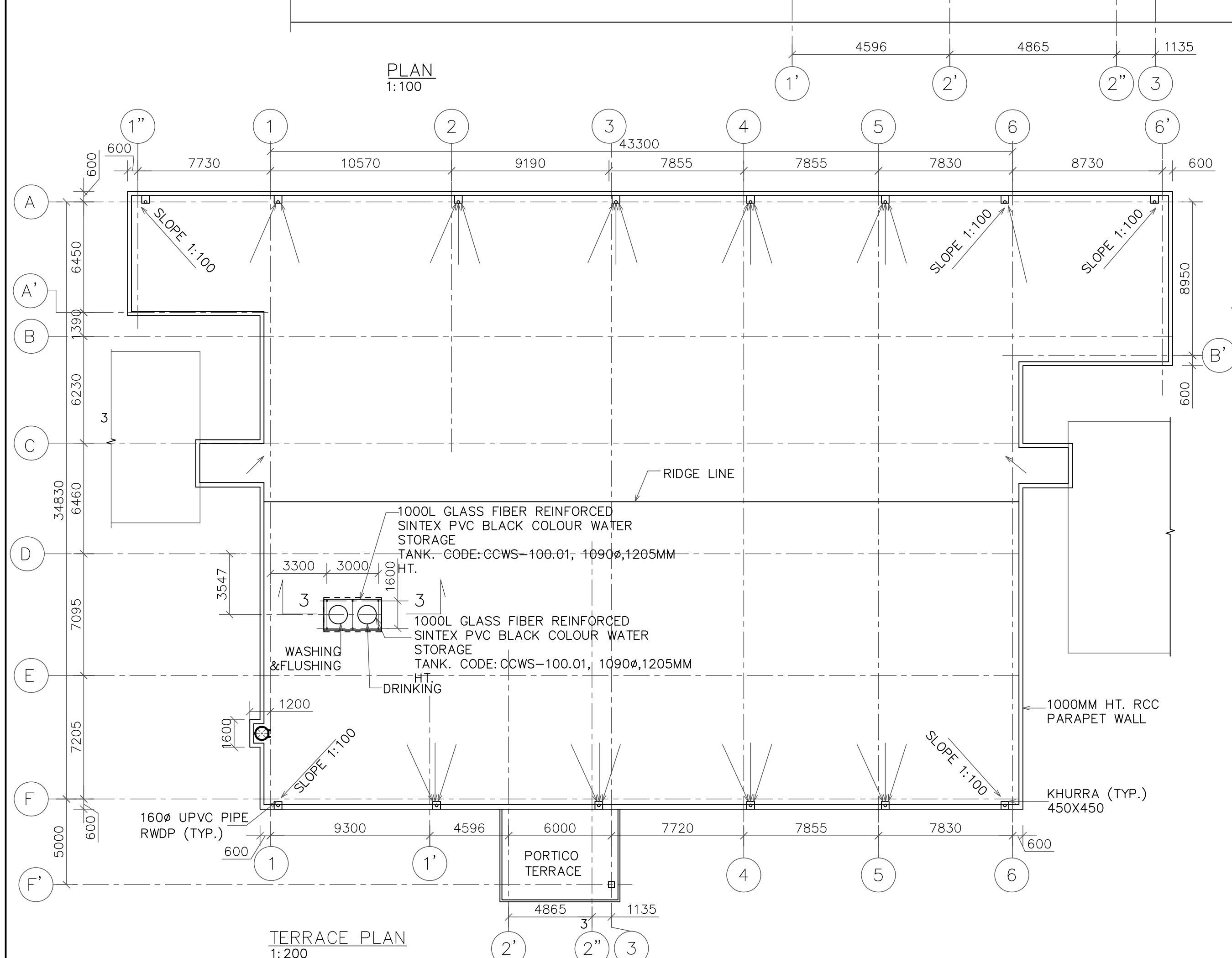
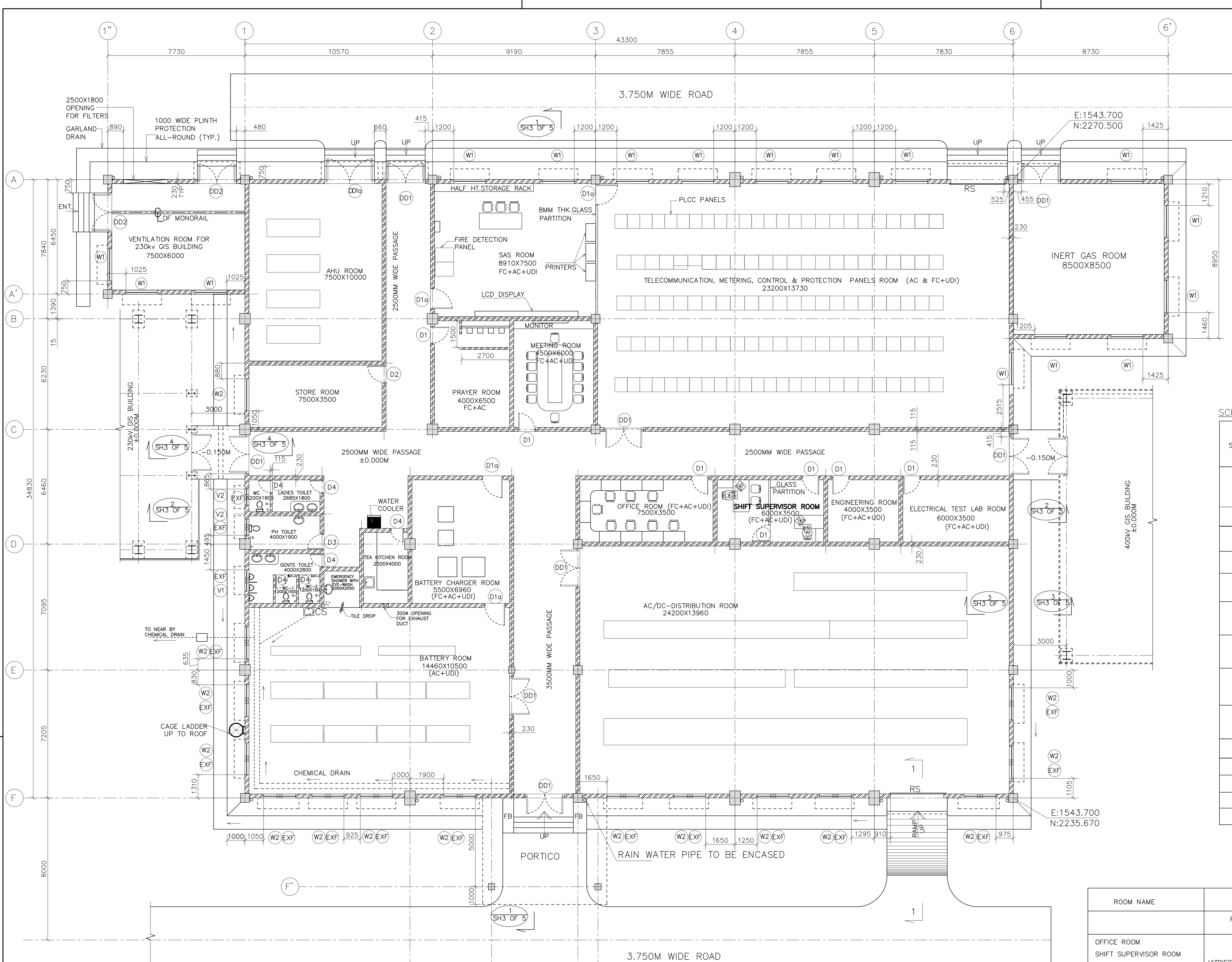
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02	22.10.20	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS&MKD.	2
01	06.08.20	USHA	SB	SP	REVISED AS PER CUSTOMER COMMENTS&MKD.	2
REV	DATE	ALTERED	CHECKED	APPROVED	NOTE	
PROJECT 2x660MW MATTHEE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (BPC MAIN PLANT PACKAGES)						
OWNER CONSULTANT:				OWNER:		
 M/s FICHTNER GmbH & CO KG, Stuttgart,GERMANY				 BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH		
				BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA		
DRAWN BY USHA 30.04.2020 DESIGNED BY SB 30.04.2020 CHECKED BY SP 30.04.2020 APPROVED BY AN 30.04.2020 SUPERSEDES SUPERSEDED BY				TITLE VEHICLE MAINTENANCE, CAR REPAIR WORKSHOP ARCHITECTURAL ELEVATION		
SIZE: ANEXO:				DRAWING NO: 421 FILE NO:		
4 SYSTEM				MATTHEE-00-UST-10-100945-PEM		
						REV

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SIZE=AD

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must not be used directly or indirectly in any way detrimental to the interest of the company.

COMPUTER FILE NAME: PE-DG-421-100--M001



DETAIL OF PLINTH PROTECTION, GARLAND DRAIN AND FLOORING 1:20

SCHEDULE OF DOORS, WINDOWS & VENTILATORS

S. NO.	SYMBOL	MASONRY OPENING SIZE(WxH)	QUANTITY	SILL FROM F.F.L	LINTEL FROM F.F.L	DESCRIPTION	REMARK
1	(DD1)	2200X2500	6	-	+2.500	M.S FRAMED DOUBLE SHUTTER DOOR WITH AUTOMATIC DOOR CLOSERS.	2HRS. FIRE RATED DOORS
	(DD1a)	2800X2800	1	-	+2.800	M.S FRAMED DOUBLE SHUTTER DOOR WITH AUTOMATIC DOOR CLOSERS.	AIR-TIGHT DOOR ONLY FOR AHU ROOM
2	(DD2)	2200X2800	2	-	+2.800	M.S FRAMED DOUBLE SHUTTER DOOR	WITH AUTOMATIC DOOR CLOSER
3	(D1)	1010X2135	7	-	+2.135	ALUMINIUM FRAMED SINGLE SHUTTER DOOR	GLAZING DOOR HALF PARTITION OF 12MM BWP PARTIAL BOARD & GLASS
4	(D1a)	1200X2500	4	-	+2.500	ALUMINIUM FRAMED SINGLE SHUTTER DOOR	
5	(D2)	1010X2135	1	-	+2.135	M.S FRAMED SINGLE SHUTTER DOOR WITH AUTOMATIC DOOR CLOSERS.	
6	(D3)	1010X2135	1	-	+2.135	SINGLE SHUTTER DOOR PVC DOORS	450X300 S.S VENTILATION LOUVER TOP OF LOUVER AT 500 HT FROM SHUTTER BOTTOM LVL.
	(D4)	750X2135	6	-	+2.135		
7	RS	3000X3500	2	-	+3.500	ELECTRICAL OPERATED M.S ROLLING SHUTTER WITH DOUBLE WALLS WITH GALVANISED COATING AS PER TENDER	
8	(W1)	1800X1200	8	+0.900	+2.135	ALUMINIUM FRAMED FIXED WINDOW WITH DOUBLE GLAZING AND 4MM THK. FLOAT GLASS AND ALL WINDOWS SHALL BE HERMETICALLY SEALED AS PER TENDER	
9	(W2)	1800X1200	15	+0.900	+2.135	ALUMINIUM FRAMED SLIDING WINDOW WITH DOUBLE GLAZING AND 4MM THK. FLOAT GLASS AND ALL WINDOWS SHALL BE HERMETICALLY SEALED AS PER TENDER	
10	(V1)	1200X600	1	+1.200	+2.135	4MM THK. SINGLE GLAZING WITH GROUND GLASS	
11	(V2)	900X600	2	+1.200	+2.135	4MM THK. SINGLE GLAZING WITH GROUND GLASS	
12	(EXP)	300x	3	+3.950	BOB	OPENING FOR EXHAUST FAN	
13	(EXP)	'HOLD'	14	-	BOB	OPENING FOR EXHAUST FAN	
14	(PARTITION WALL)	6500X2400	1	-	+2.400	8MM THK. GLASS PARTITION WALL WITH ALUMINIUM FRAME	

- LEGEND 1: -
- PROFILLED METAL SHEETING, TRAPEZOIDAL
 - BRICK MASONRY WALL
 - REINFORCED CONCRETE
 - RUBBLE SOLING
 - EARTH FILLING
 - P.C.C

AREA: -
BUILT-UP AREA : 1508.9 SQMT.

- LEGEND 2: -
- TOC : TOP OF CONCRETE
 - BOB : BOTTOM OF BEAM
 - TYP : TYPICAL
 - THK : THICKNESS
 - PCC : PLAIN CEMENT CONCRETE
 - BF : BOTH FACE
 - NTS : NOT TO SCALE
 - JC : JOINER CLOSET
 - FC : FALSE CEILING
 - AC : AIR CONDITIONING
 - CS : CLEAN SINK
 - BOL : BOTTOM OF LINTEL
 - WC : WATER CLOSET
 - RWP : RAIN WATER DOWN TAKE PIPE
 - UDI : UNDER DECK INSULATION
 - TOT : TOP OF THE TERRACE

NOTES: -

- ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
- DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED
- FOR CABLE TRENCH LAYOUT & DETAILS REFER RELEVANT ELECTRICAL DRAWINGS.

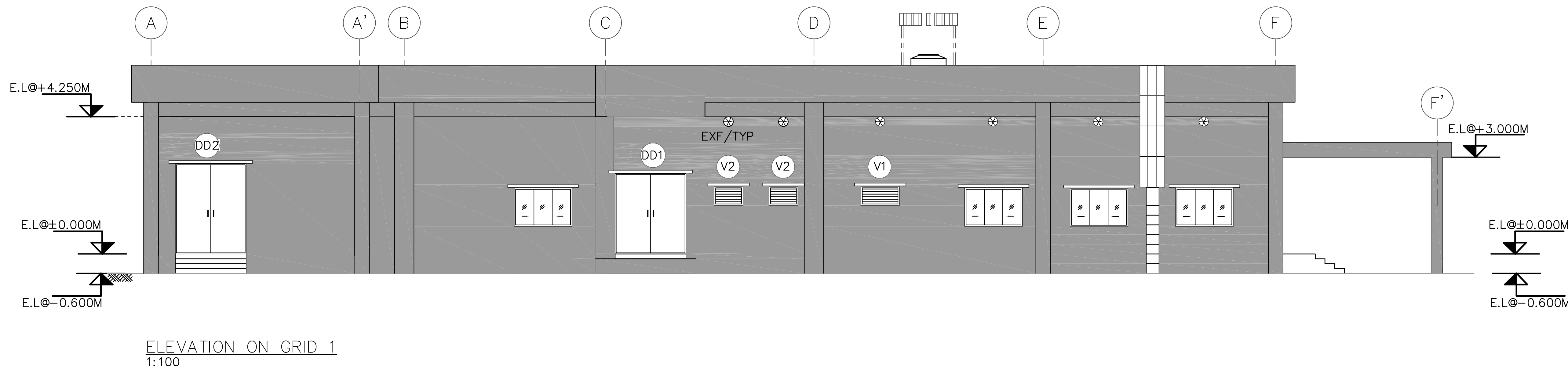
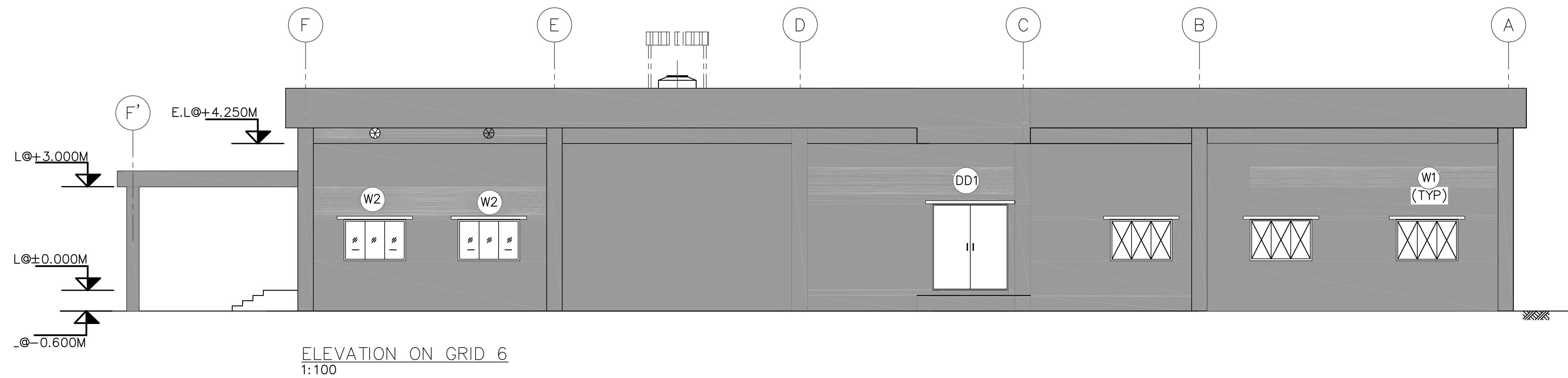
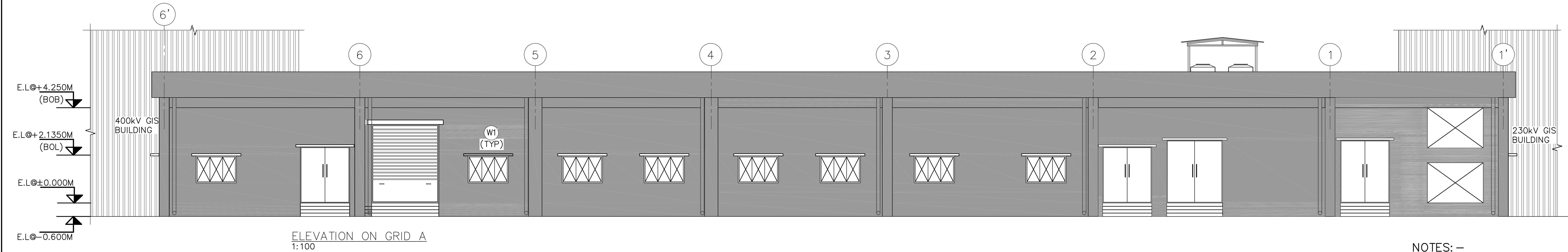
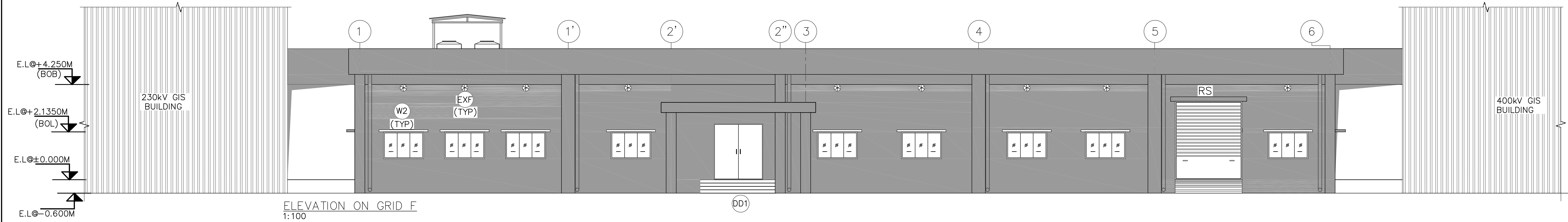
REFERENCES: -

- READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO: Maitree-00-UCA-LH-325134-TBG (SHEET 2 OF 5 TO 5 OF 5)
- FOR PLUMBING & SANITARY DETAILS REFER DRAWING NO: Maitree-00-UCA-LC-325141-TBG

ROOM NAME	FLOOR FINISH	SKERTING (150MM HIGH)	DADO	CEILING FINISH	WALL FINISH	EXTERIOR FINISH
OFFICE ROOM SHIFT SUPERVISOR ROOM ENGINEERING ROOM SAS ROOM PRAYER ROOM MEETING ROOM	VITRIFIED CERAMIC TILES (FLOOR TILES WITH EPOXY GROUT)	VITRIFIED CERAMIC TILES	--	COMBINATION OF GLASS FIBER GYPSUM PLASTER BOARD (GRO) 12MM THK. AND FIRE COATED (COLOUR) ALUMINIUM FALSE CEILING	PLASTERED & PAINTED WITH ACRYLIC EMULSION PAINT OF BERGER OR EQUIVALENT MAKE - 2 COATS OVER 1 - COAT PRIMER OVER POP	SINGLE SKIN METAL SHEET CLADDING
BATTERY ROOM ELECTRICAL TEST LAB ROOM BATTERY CHARGER ROOM	ACID RESISTANT CERAMIC TILES UPTO 1.2M LEVEL (ABOVE 1.2M ACID RESISTANT PAINT)	--	ACID RESISTANT TILES (20MM THK.)	2 COATS OF CHLORINATED RUBBER ACID RESISTANT PAINT OVER CHLORINATED RUBBER ZINC PHOSPHATE PRIMER	2 COATS OF CHLORINATED RUBBER ACID RESISTANT PAINT OVER CHLORINATED RUBBER ZINC PHOSPHATE PRIMER	
AC/DC-DISTRIBUTION ROOM TELECOMMUNICATION, METERING, CONTROL & PROTECTION PANEL ROOM AHU ROOM	IPS METALLIC HARDNER TILES	IPS TILES	--			
STORE ROOM	CARBORUNDUM (25MM THK. HEAVY DUTY CEMENT CONCRETE TILES) WITH OIL RESISTANT EPOXY COATING (150 MICRON THK.)	CARBORUNDUM (25MM THK. HEAVY DUTY CEMENT CONCRETE TILES)	--	PLASTER - 12 MM THK IN 1:4 CEMENT MORTAR POP & ACRYLIC DISTEMPER OVER POLYMER	PLASTERED & PAINTED WITH ACRYLIC EMULSION PAINT OF BERGER OR EQUIVALENT MAKE - 2 COATS OVER 1 - COAT PRIMER OVER POP	
PH. HAND. TOILET GENTS TOILET LADIES TOILET	GLAZED NON-SLIP FULLY VITRIFIED CERAMIC TILES (7MM THK.)	--	GLAZED CERAMIC TILES UP TO 2300MM HT.			
PANTRY	GLAZED NON-SLIP FULLY VITRIFIED CERAMIC TILES & PLATFORM WITH GRANITE TOP	--	GLAZED CERAMIC TILES UP TO 2300MM HT.			

4					
3					
2	400/230KV STRUCTURE LAYOUT PLAN & SECTION	Maitree-00-BTW-LD-325004-TBG			
1	CONCEPTUAL LAYOUT OF 400/230 KV GIS CONTROL BUILDING	Maitree-00-BTW-LD-325013-TBG			
NO.	TITLE	NO.	TITLE	NO.	TITLE
REFERENCE DRAWINGS					
5	30.07.19	REVISED AS PER CLIENT COMMENTS	KTM	KVJ	TSK
4	16.02.19	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
3	06.10.18	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
2	03.10.18	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
1	25.07.18	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
REV	DATE	DESCRIPTION	MADE	CHECK	APPR.
07.04.18		RELEASED FOR APPROVAL	KSA	KVJ	TSK
FOR APPROVAL					
PROJECT: 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH					
OWNER CONSULTANT: M/s FICHTNER GmbH & Co KG, FICHTNER Stuttgart, GERMANY					
BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS GROUP NOIDA					
DESIGN TRIBE (INDIA) PVT. LTD. Consulting Engineers & Architects RAJA PRASADAMU, 3 rd FLOOR WING-1, PLOT NO:6,6A,6B, MASUD BANDA ROAD, KONDAPUR, HYDERABAD-500 084, INDIA.					
SWITCHYARD CONTROL ROOM BUILDING: -					
FLOOR PLANS ARCHITECTURE					
DESIGN: KVJ	MADE: KSA	DATE: 27.04.18	SCALE: 1:100	JOB NO.: 117049	SHEET: 1 OF 9
CHECK: KVJ	APPR: TSK	REV: 30.07.19	DWG. NO.: Maitree-00-UCA-LH-325134-TBG		REV: 5





NOTES: –
1. ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
2. DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED

REFERENCES: –
1. READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO:
Maitree-00-UCALH-325134-TBG (SHEET 1 OF 5 & 3 OF 5 TO 5 OF 5)

NO.	TITLE	DRAWING NO.
4		
3		
2	400/230kv STRUCTURE LAYOUT PLAN & SECTION	MAITREE-00-BTW-LD-325004-TBG
1	CONCEPTUAL LAYOUT OF 400/230 KV GIS CONTROL BUILDING	MAITREE-00-BTW-LH-325013-TBG

REV.	DATE	DESCRIPTION	MADE	CHECK	APPR.
5	30.07.19	NO CHANGES	KTM	KVJ	TSK
4	16.02.19	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
3	06.11.18	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
2	03.10.18	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
1	25.07.18	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
0	27.04.18	RELEASED FOR APPROVAL	KSA	KVJ	TSK

REVISION
FOR APPROVAL

PROJECT:
2x660MW MAITREE SUPER THERMAL POWER PROJECT,
RAMPAL, BANGLADESH
(EPC MAIN PLANT PACKAGE)

OWNER:
BANGLADESH-INDIA FRIENDSHIP POWER
COMPANY (PVT.) LIMITED, BANGLADESH

OWNER CONSULTANT:
M/s FICHTNER GmbH & Co KG,
FICHTNER
Stuttgart,GERMANY

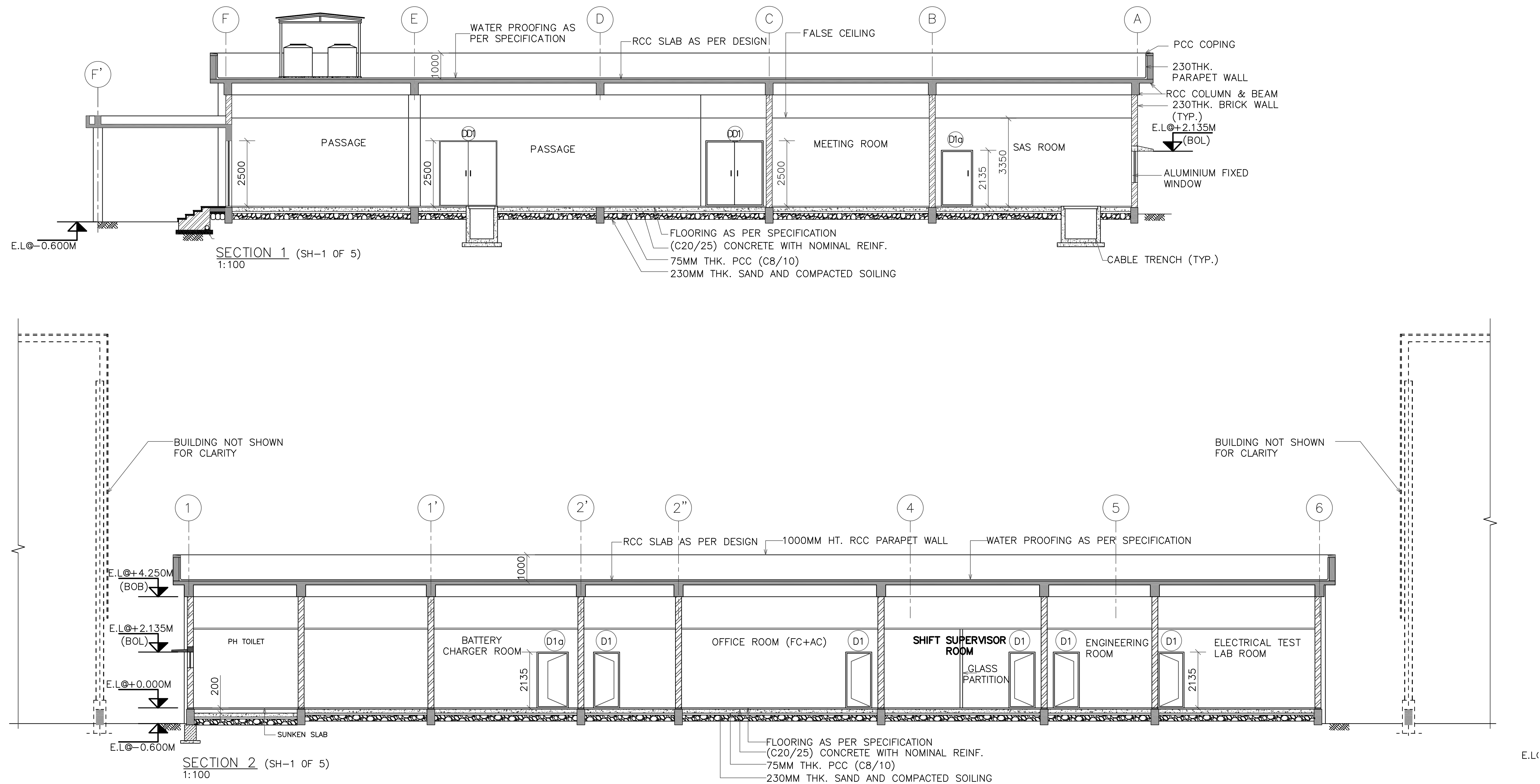
BHARAT HEAVY ELECTRICALS LIMITED
TRANSMISSION BUSINESS GROUP
NOIDA

DESIGN TRIBE (INDIA) PVT. LTD.
Consulting Engineers & Architects
RAJA PRAASADAMU, 3rd FLOOR WING-1,
PLOT NO:6,6A,6B, MASJID BANDA ROAD,
KONDAPUR, HYDERABAD-500 084, INDIA.

SWITCHYARD CONTROL ROOM BUILDING: –

ELEVATIONS
ARCHITECTURE

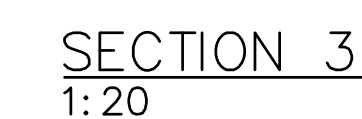
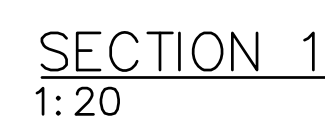
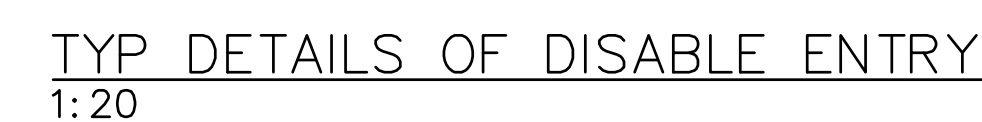
DESIGN: KVJ	MADE: KSA	DATE: 27.04.18	SCALE: 1:100	JOB NO.: 117049	SHEET: 2 OF 9	SIZE: A1
CHECK: KVJ	APPR: TSK	REV.: 30.07.19	DWG. NO.: Maitree-00-UCALH-325134-TBG			REV: 5



NOTES: -
1. ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
2. DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED

REFERENCES: -
1. READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO: Maitree-00-UCA-LH-325134-TBG (SHEET 1 OF 5, 2 OF 5, 4 OF 5 & 5 OF 5)

4				
3				
2	400/230kv STRUCTURE LAYOUT PLAN & SECTION			MAITREE-00-BTW-LD-325004-TBG
1	CONCEPTUAL LAYOUT OF 400/230 KV GIS CONTROL BUILDING			MAITREE-00-BTW-LH-325013-TBG
NO.	TITLE			DRAWING NO.
REFERENCE DRAWINGS				
4	16.02.19	NO CHANGE	KTM	KVJ TSK
4	16.02.19	NO CHANGE	KSA	KVJ TSK
3	06.11.18	NO CHANGE	KSA	KVJ TSK
2	03.10.18	NO CHANGE	KSA	KVJ TSK
1	25.07.18	REVISED AS PER CLIENT COMMENTS	KSA	KVJ TSK
0	27.04.18	RELEASED FOR APPROVAL	KSA	KVJ TSK
REV.	DATE	DESCRIPTION	MADE	CHECK APPR.
REVISION				
FOR APPROVAL				
PROJECT: 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)				
OWNER: BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH				
OWNER CONSULTANT: M/s FICHTNER GmbH & Co KG, FICHTNER Stuttgart,GERMANY				
BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS GROUP NOIDA				
DESIGN TRIBE (INDIA) PVT. LTD. Consulting Engineers & Architects RAJA PRAASADAMU, 3 rd FLOOR WING-1, PLOT NO:6,6A,6B, MASJID BANDA ROAD, KONDAPUR, HYDERABAD-500 084, INDIA.				
SWITCHYARD CONTROL ROOM BUILDING: -				
SECTIONS ARCHITECTURE				
DESIGN: KVJ	MADE: KSA	DATE: 27.04.18	SCALE: 1:100	JOB NO.: 117049
CHECK: KVJ	APPR: TSK	REV.: 30.07.19	DWG. NO.: Maitree-00-UCA-LH-325134-TBG	SHEET: 3 OF 9
				SIZE: A1
				REV: 5



1. ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
2. DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED
3. STIFFNER BEAM OF MAX 150MM HIGH WITH 2 NOS.D10 BARS.

1. READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO:
Maitree-00-UCA-LH-325134-TBG (SHEET 1 OF 5 TO 3 OF 5 & 5 OF 5)

REFERENCE DRAWINGS

REVISION

PROJECT:	2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)
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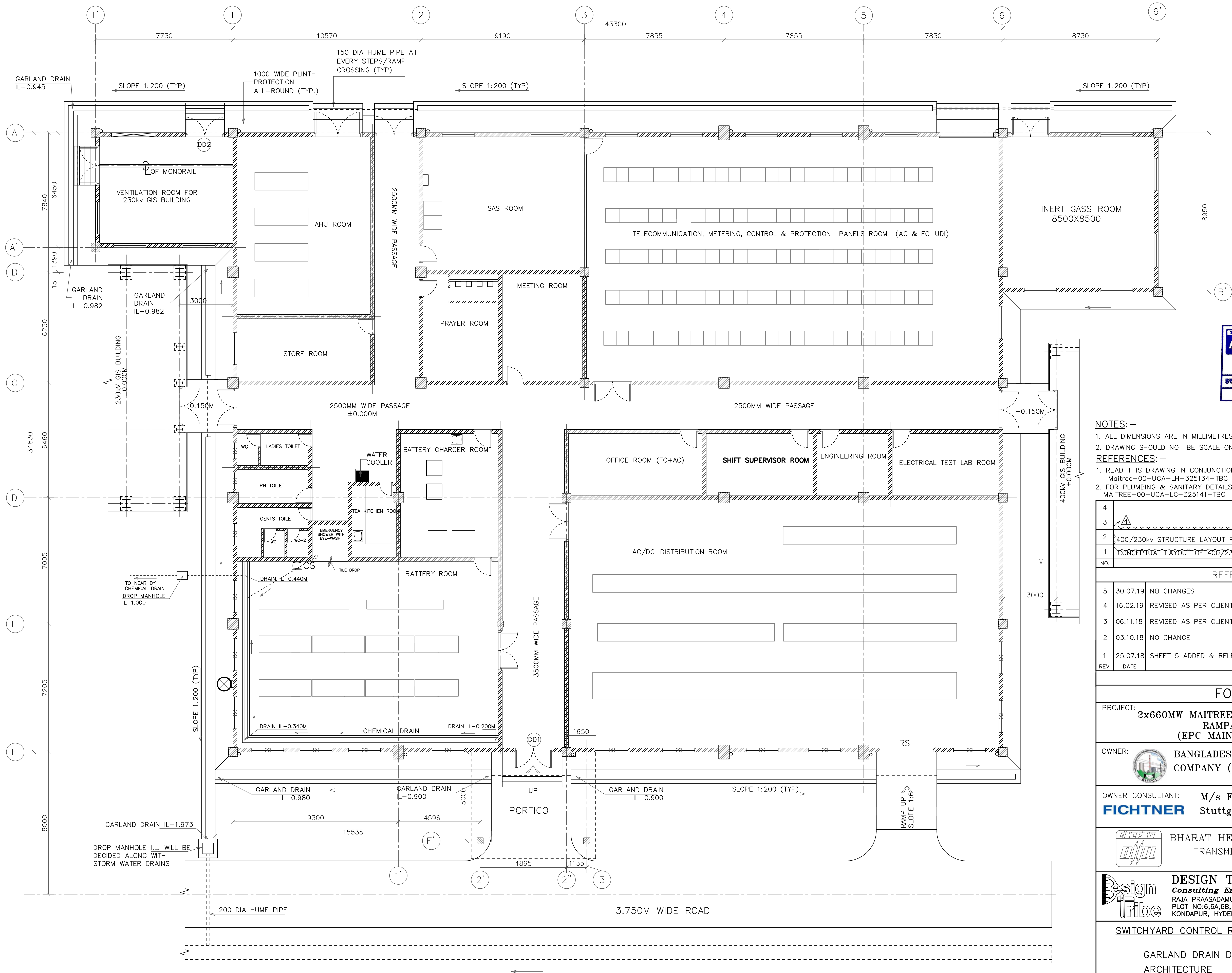
OWNER CONSULTANT: **FICHTNER** M/s FICHTNER GmbH & Co KG,
Stuttgart, GERMANY

DESIGN TRIBE (INDIA) PVT. LTD.
Consulting Engineers & Architects
 RAJA PRAASADAMU, 3rd FLOOR WING-1,
 PLOT NO:6,6A,6B, MASJID BANDA ROAD,
 KONDAPUR, HYDERABAD-500 084, INDIA.

TYPICAL DEATILS
ARCHITECTURE

DESIGN: KVJ	MADE: KSA	DATE: 25.07.18	SCALE: 1:100	JOB NO.: 117049	SHEET: 4 OF 9	SIZE: A1
CHECK: KVJ	APPR: TSK	REV.: 30.07.19	DWG. NO.: Maitree-00-UCA-LH-325134-TBG			REV.: 5





PLAN AT ±0.000M LVL.
1:100

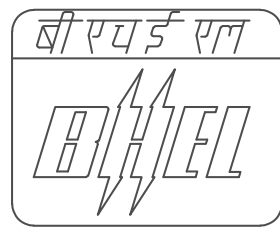


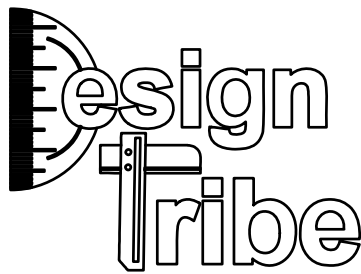
- NOTES: -
- ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
 - DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED
- REFERENCES: -
- READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO: Maitree-00-UCA-LH-325134-TBG (SHEET 1 OF 5 & 4 OF 5)
 - FOR PLUMBING & SANITARY DETAILS REFER DRAWING NO: MAITREE-00-UCA-LC-325141-TBG

4				
3				
2	400/230kv STRUCTURE LAYOUT PLAN & SECTION		MAITREE-00-BTW-LD-325004-TBG	
1	CONCEPTUAL LAYOUT OF 400/230 KV GIS CONTROL BUILDING		MAITREE-00-BTW-LH-325013-TBG	
NO.	TITLE		DRAWING NO.	

REFERENCE DRAWINGS					
5	30.07.19	NO CHANGES	KTM	KVJ	TSK
4	16.02.19	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
3	06.11.18	REVISED AS PER CLIENT COMMENTS	KSA	KVJ	TSK
2	03.10.18	NO CHANGE	KSA	KVJ	TSK
1	25.07.18	SHEET 5 ADDED & RELEASED FOR APPROVAL	KSA	KVJ	TSK
REV.	DATE	DESCRIPTION	MADE	CHECK	APPR.

REVISION	
FOR APPROVAL	
PROJECT: 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)	
OWNER:  BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH	
OWNER CONSULTANT: M/s FICHTNER GmbH & Co KG, FICHTNER Stuttgart,GERMANY	

	BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS GROUP NOIDA
---	--

	DESIGN TRIBE (INDIA) PVT. LTD. <i>Consulting Engineers & Architects</i> RAJA PRAASADAMU, 3 rd FLOOR WING-1, PLOT NO:6,6A,6B, MASJID BANDA ROAD, KONDAPUR, HYDERABAD-500 084, INDIA.
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<u>SWITCHYARD CONTROL ROOM BUILDING: -</u>						
GARLAND DRAIN DETAILS ARCHITECTURE						
DESIGN: KVJ	MADE: KSA	DATE: 25.07.18	SCALE: 1:100	JOB NO.: 117049	SHEET: 5 OF 9	SIZE: A1
CHECK: KVJ	APPR: TSK	REV: 30.07.19	DWG. NO.: Maitree-00-UCA-LH-325134-TBG			REV: 5



निर्माण हेतु जारी

पिछली प्रतीयाँ नष्ट कर दें।

इस्स. 31/01/2019 दिनांक 08-11-19

पारेषण व्यापार अभियांत्रिकी प्रबंधन

NOTES: –
1. ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
2. DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED

REFERENCES: –
1. READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO:
4 Maitree–00–UCA–LH–325134–TBG (SHEET 1 OF 9 TO 5 OF 9)

3		
2		
1	CONCEPTUAL LAYOUT OF 400/230 KV GIS CONTROL BUILDING	MAITREE–00–BTW–LH–325013–TBG
NO.	TITLE	DRAWING NO.

REFERENCE DRAWINGS

5	30.08.19	NO CHANGES	KVJ	KVJ	TSK
4	16.02.19	UPDATED AS PER LATEST ARCHITECTURAL DRAWINGS	CSK	KVJ	TSK
3	06.11.18	NO CHANGE	CSK	KVJ	TSK
2	05.10.18	NO CHANGES	CSK	KVJ	TSK
1	19.09.18	RELEASED FOR APPROVAL	CSK	KVJ	TSK
REV.	DATE	DESCRIPTION	MADE	CHECK	APPR.

REVISION

FOR APPROVAL

PROJECT: 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)

OWNER: BANGLADESH–INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH

OWNER CONSULTANT: M/s FICHTNER GmbH & Co KG, Stuttgart,GERMANY

BHARAT HEAVY ELECTRICALS LIMITED
TRANSMISSION BUSINESS GROUP
NOIDA

DESIGN TRIBE (INDIA) PVT. LTD.
Consulting Engineers & Architects
RAJA PRAASADAMU, 3rd FLOOR WING–1,
PLOT NO:6,6A,6B, MASJID BANDA ROAD,
KONDAPUR, HYDERABAD–500 084, INDIA.

SWITCHYARD CONTROL ROOM AREA: –

3D VIEWS
ARCHITECTURE

DESIGN: KVJ	MADE: CSK	DATE: 19.09.18	SCALE: 1:100	JOB NO.: 117049	SHEET: 6 OF 9	SIZE: A1
CHECK: KVJ	APPR: TSK	REV.: 30.08.19	DWG. NO.: Maitree–00–UCA–LH–325134–TBG			REV: 5



NORTH WEST VIEW



NORTH ELEVATION

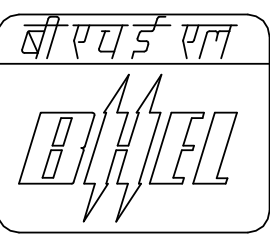
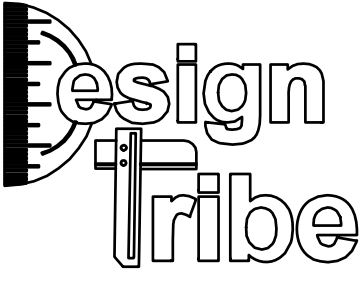
निर्माण हेतू जारी

पिछली प्रतीयाँ नष्ट कर दें।

हस्ता. अली अहमद दिनांक 08-11-19

पारेषण व्यापार अभियांत्रिकी प्रबंधन

- NOTES: –
- 1. ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
 - 2. DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED
- REFERENCES: –
- 1. READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO: Maitree–00–UCA–LH–325134–TBG (SHEET 1 OF 9 TO 5 OF 9)

4					
3					
2					
1	CONCEPTUAL LAYOUT OF 400/230 KV GIS CONTROL BUILDING			MAITREE–00–BTW–LH–325013–TBG	
NO.	TITLE			DRAWING NO.	
		REFERENCE DRAWINGS			
5	30.08.19	NO CHANGE	KVJ	KVJ	TSK
4	16.02.19	UPDATED AS PER LATEST ARCHITECTURAL DRAWINGS	CSK	KVJ	TSK
3	06.11.18	NO CHANGE	CSK	KVJ	TSK
2	05.10.18	NO CHANGES	CSK	KVJ	TSK
1	19.09.18	RELEASED FOR APPROVAL	CSK	KVJ	TSK
REV.	DATE	DESCRIPTION	MADE	CHECK	APPR.
REVISION					
FOR APPROVAL					
PROJECT: 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER:  BANGLADESH–INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH					
OWNER CONSULTANT: M/s FICHTNER GmbH & Co KG, FICHTNER Stuttgart,GERMANY					
 BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS GROUP NOIDA					
 DESIGN TRIBE (INDIA) PVT. LTD. Consulting Engineers & Architects RAJA PRAASADAMU, 3 rd FLOOR WING–1, PLOT NO:6,6A,6B, MASJID BANDA ROAD, KONDAPUR, HYDERABAD–500 084, INDIA.					
SWITCHYARD CONTROL ROOM AREA:–					
3D VIEWS ARCHITECTURE					
DESIGN: KVJ	MADE: CSK	DATE: 19.09.18	SCALE: 1:100	JOB NO.: 117049	SHEET: 7 OF 9
CHECK: KVJ	APPR: TSK	REV: 30.08.19	DWG. NO.: Maitree–00–UCA–LH–325134–TBG	REV: 5	SIZE: A1



SOUTH WEST VIEW



EAST VIEW

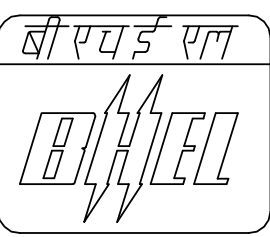
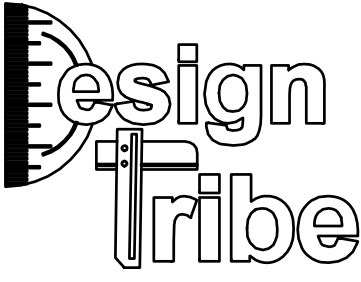
निर्माण हेतु जारी

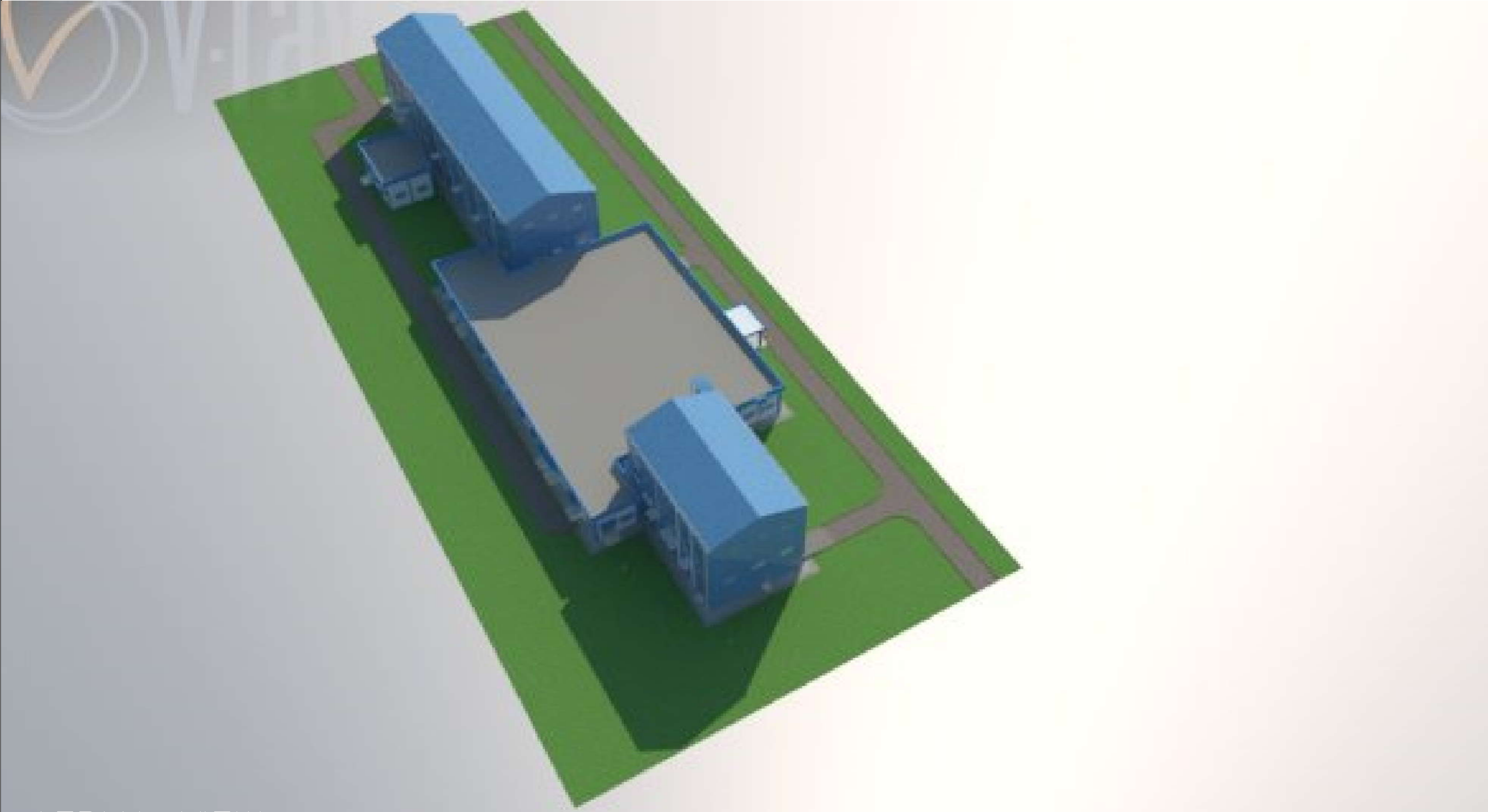
पिछली प्रतीयाँ नष्ट कर दें।

इस्स. 31/11/19 दिनांक 08-11-19

पारेषण व्यापार अभियांत्रिकी प्रबंधन

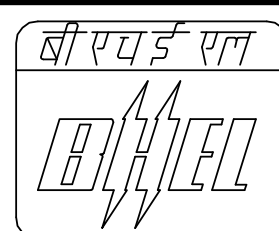
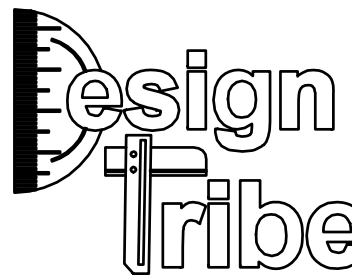
- NOTES: –
- 1. ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
 - 2. DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED
- REFERENCES: –
- 1. READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO: Maitree-00-UCA-LH-325134-TBG (SHEET 1 OF 9 TO 5 OF 9)

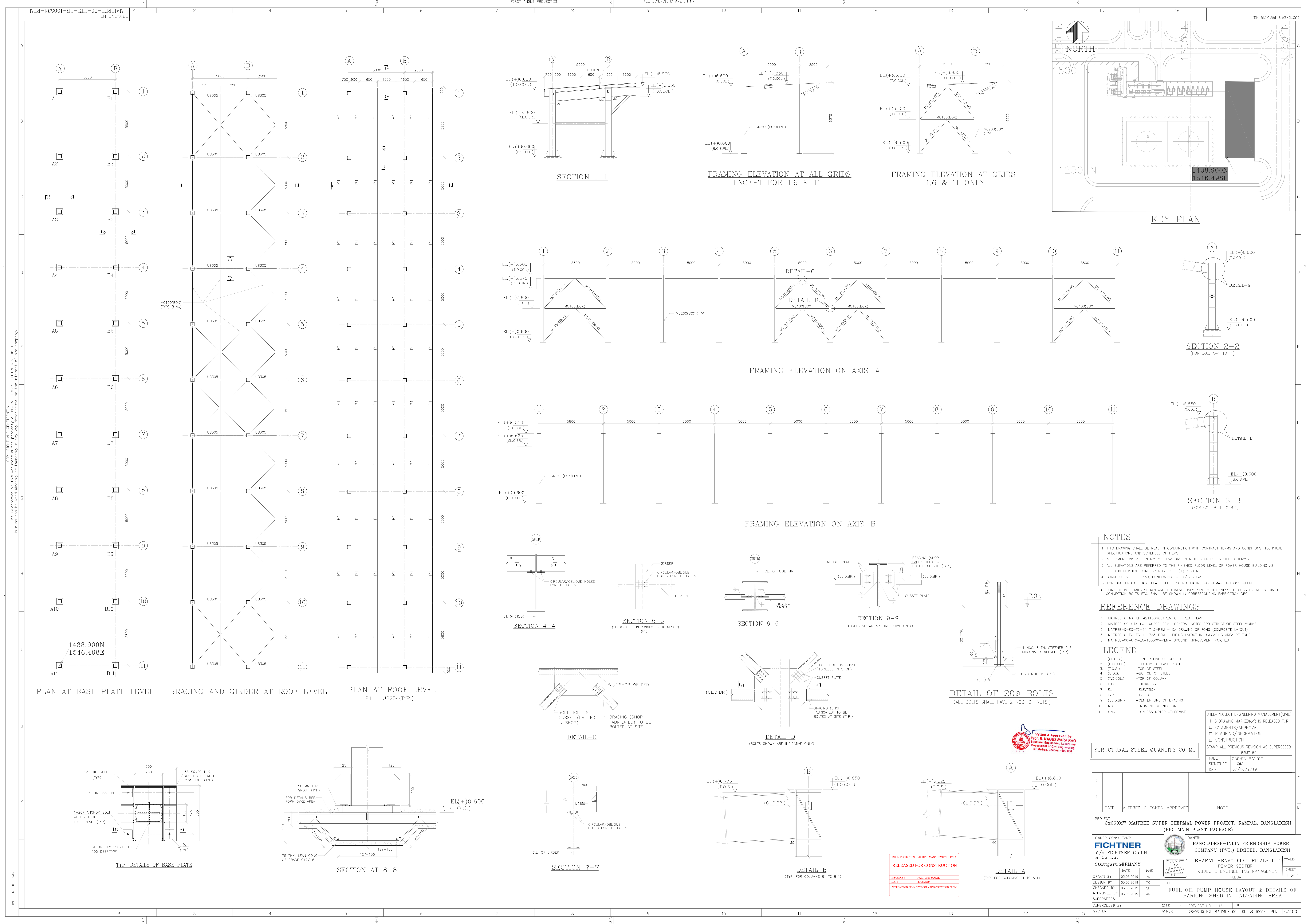
4					
3					
2					
1	CONCEPTUAL LAYOUT OF 400/230 KV GIS CONTROL BUILDING				MAITREE-00-BTW-LH-325013-TBG
NO.	TITLE				DRAWING NO.
REFERENCE DRAWINGS					
5	30.08.19	NO CHANGES	KVJ	KVJ	TSK
4	16.02.19	UPDATED AS PER LATEST ARCHITECTURAL DRAWINGS	CSK	KVJ	TSK
3	06.11.18	NO CHANGE	CSK	KVJ	TSK
2	05.10.18	NO CHANGES	CSK	KVJ	TSK
1	19.09.18	RELEASED FOR APPROVAL	CSK	KVJ	TSK
REV.	DATE	DESCRIPTION	MADE	CHECK	APPR.
REVISION					
FOR APPROVAL					
PROJECT: 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)					
OWNER:  BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH					
OWNER CONSULTANT: M/s FICHTNER GmbH & Co KG, FICHTNER Stuttgart,GERMANY					
 BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS GROUP NOIDA					
 DESIGN TRIBE (INDIA) PVT. LTD. Consulting Engineers & Architects RAJA PRAASADAMU, 3 rd FLOOR WING-1, PLOT NO:6,6A,6B, MASJID BANDA ROAD, KONDAPUR, HYDERABAD-500 084, INDIA.					
SWITCHYARD CONTROL ROOM AREA: –					
3D VIEWS ARCHITECTURE					
DESIGN: KVJ	MADE: CSK	DATE: 19.09.18	SCALE: 1:100	JOB NO.: 117049	SHEET: 8 OF 9
CHECK: KVJ	APPR: TSK	REV: 30.08.19	DWG. NO.: Maitree-00-UCA-LH-325134-TBG	REV: 5	SIZE: A1



- NOTES: –
1. ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS ARE IN METRES.
 2. DRAWING SHOULD NOT BE SCALE ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED

- REFERENCES: –
1. READ THIS DRAWING IN CONJUNCTION WITH DRAWING NO:
Maitree-00-UCA-LH-325134-TBG (SHEET 1 OF 9 TO 5 OF 9)

4						
3						
2						
1	CONCEPTUAL LAYOUT OF 400/230 KV GIS CONTROL BUILDING			MAITREE-00-BTW-LH-325013-TBG		
NO.	TITLE			DRAWING NO.		
REFERENCE DRAWINGS						
5	30.08.19	NO CHANGES		KVJ	KVJ	TSK
4	16.02.19	RELEASED FOR APPROVAL		CSK	KVJ	TSK
REV.	DATE	DESCRIPTION		MADE	CHECK	APPR.
REVISION						
FOR APPROVAL						
PROJECT: 2x660MW MAITREE SUPER THERMAL POWER PROJECT, RAMPAL, BANGLADESH (EPC MAIN PLANT PACKAGE)						
OWNER:  BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED, BANGLADESH						
OWNER CONSULTANT: M/s FICHTNER GmbH & Co KG, FICHTNER Stuttgart,GERMANY						
 BHARAT HEAVY ELECTRICALS LIMITED TRANSMISSION BUSINESS GROUP NOIDA						
 DESIGN TRIBE (INDIA) PVT. LTD. <i>Consulting Engineers & Architects</i> RAJA PRAASADAMU, 3 rd FLOOR WING-1, PLOT NO:6,6A,6B, MASJID BANDA ROAD, KONDAPUR, HYDERABAD-500 084, INDIA.						
<u>SWITCHYARD CONTROL ROOM AREA: -</u>						
3D VIEWS ARCHITECTURE						
DESIGN: KVJ	MADE: CSK	DATE: 16.02.19	SCALE: 1:100	JOB NO.: 117049	SHEET: 9 OF 9	SIZE: A1
CHECK: KVJ	APPR: TSK	REV: 30.08.19	DWG. NO.: Maitree-00-UCA-LH-325134-TBG			REV: 5



- ### NOTES

 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN MM & ELEVATIONS IN METERS UNLESS STATED OTHERWISE.
 - ALL ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL(+) 5.60 M.
 - GRADE OF STEEL- E350, CONFORMING TO SA/IS-2062.
 - FOR GROUTING OF BASE PLATE REF. DRG. NO. MATREE-00-UMA-LB-100111-PEM.
 - CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- ### REFERENCE DRAWINGS :-

 - MATREE-0-MA-LD-421100M01PEM-C - PLOT PLAN
 - MATREE-00-UTX-LC-100200-PEM - GENERAL NOTES FOR STRUCTURE STEEL WORKS
 - MATREE-0-EG-TC-111713-PEM - GA DRAWING OF FOHS (COMPOSITE LAYOUT)
 - MATREE-0-EG-TC-111723-PEM - PIPING LAYOUT IN UNLOADING AREA OF FOHS
 - MATREE-00-UTX-LA-100300-PEM - GROUND IMPROVEMENT PATCHES
- ### LEGEND

1. (C.L.O.G.)	- CENTER LINE OF GUSSET
2. (B.O.B.PL.)	- BOTTOM OF BASE PLATE
3. (T.O.S.)	- TOP OF STEEL
4. (B.O.S.)	- BOTTOM OF STEEL
5. (T.O.COL.)	- TOP OF COLUMN
6. THK.	- THICKNESS
7. EL.	- ELEVATION
8. TYP.	- TYPICAL
9. (C.L.O.BR.)	- CENTER LINE OF BRACING
10. MC	- MOMENT CONNECTION
11. UNO	- UNLESS NOTED OTHERWISE

STRUCTURAL STEEL QUANTITY 20 MT			
STAMP ALL PREVIOUS REVISION AS SUPERSEDED			
OWNER CONSULTANT:		OWNER:	
FICHTNER		BANGLADESH-INDIA FRIENDSHIP POWER	
M/s FICHTNER GmbH		COMPANY (PVT.) LIMITED, BANGLADESH	
Stuttgart, GERMANY		BHARAT HEAVY ELECTRICALS LTD	
DRAWN BY		PROJECTS ENGINEERING MANAGEMENT	
DATE		NOLDA	
DESIGN BY		TITLE	
DATE		FUEL OIL PUMP HOUSE LAYOUT & DETAILS OF	
CHECKED BY		PARKING SHED IN UNLOADING AREA	
APPROVED BY		SUPERSEDED BY	
DATE		SUPERSEDED BY	
SYSTEM		SIZE: A0	
		ANNEX: PROJECT NO. 421	
		DRAWING NO: MATREE-00-UEL-LB-100534-PEM	
		REVISION	